

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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JAN 23 2001

4WD-RCRA

Mr. Donald Emert Plant Manager Air Products and Chemicals, Inc. 4575 Highway 90 East Pace, FL 32571

SUBJ: RCRA Compliance Evaluation Inspection
Air Products and Chemicals, Inc. (EPA ID# FLD 008 155 673)

Dear Mr. Emert:

On December 11, 2000, a Compliance Evaluation Inspection was conducted by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) at the Air Products and Chemicals facility, located on Highway 90 East in Pace, Florida, to determine the facility's compliance status with RCRA.

Enclosed is the EPA RCRA Site Inspection Report which indicates that violations of RCRA were discovered. A copy of this report has also been forwarded to the FDEP. Pursuant to the EPA - FDEP Memorandum of Agreement, the FDEP is the lead agency for any potential enforcement action which may result from the RCRA violations cited in the report.

If you have any questions, please contact Laurie Benton DiGaetano, of my staff, at (404) 562-8597.

Sincerely yours,

Jeffrey T. Pallas, Chief

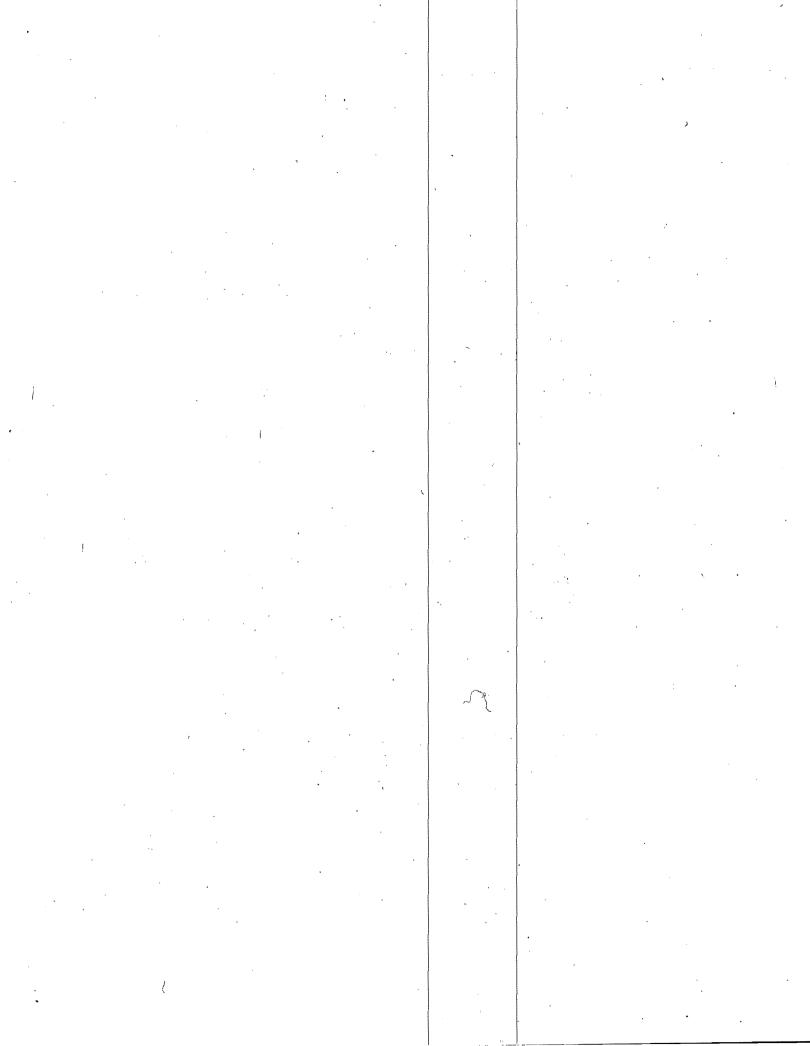
South Enforcement and Compliance Section RCRA Enforcement and Compliance Branch

Enclosure

cc: Satish Kastury, FDEP w/encl.

Bill Kellenberger, FDEP w/encl.

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ATLANTA, GEORGIA 30303-8960

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4WD-RCRA

Mr. Satish Kastury
Hazardous Waste Administrator
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399

SUBJ: RCRA Compliance Evaluation Inspection
Air Products and Chemicals, Inc. (EPA ID # FLD 008 155 673)

Dear Mr. Kastury:

On December 11, 2000, a Compliance Evaluation Inspection was conducted by the United States Environmental Protection Agency (EPA) and the Florida Department of Environmental Protection (FDEP) at the Air Products facility, located on Highway 90 East in Pace, Florida, to determine the facility's compliance status with RCRA.

Enclosed is the EPA RCRA Site Inspection Report which indicates that violations of RCRA were discovered. Pursuant to the EPA - FDEP Memorandum of Agreement, FDEP is the lead agency for enforcement of the violations discovered during this inspection.

Pursuant to the 1996 Hazardous Waste Civil Enforcement Response Policy (ERP), Day 0 is the date of the inspection referenced above. Based upon the information available at this time concerning violations discovered during the referenced inspection, the facility is determined to be a Secondary Violator (SV). Therefore, you must issue an informal enforcement action to the facility within ninety(90) days from Day 0, and the facility must return to compliance within 90 days from receipt of that informal action.

If you have any questions, please contact Laurie Benton DiGaetano at (404) 562-8597.

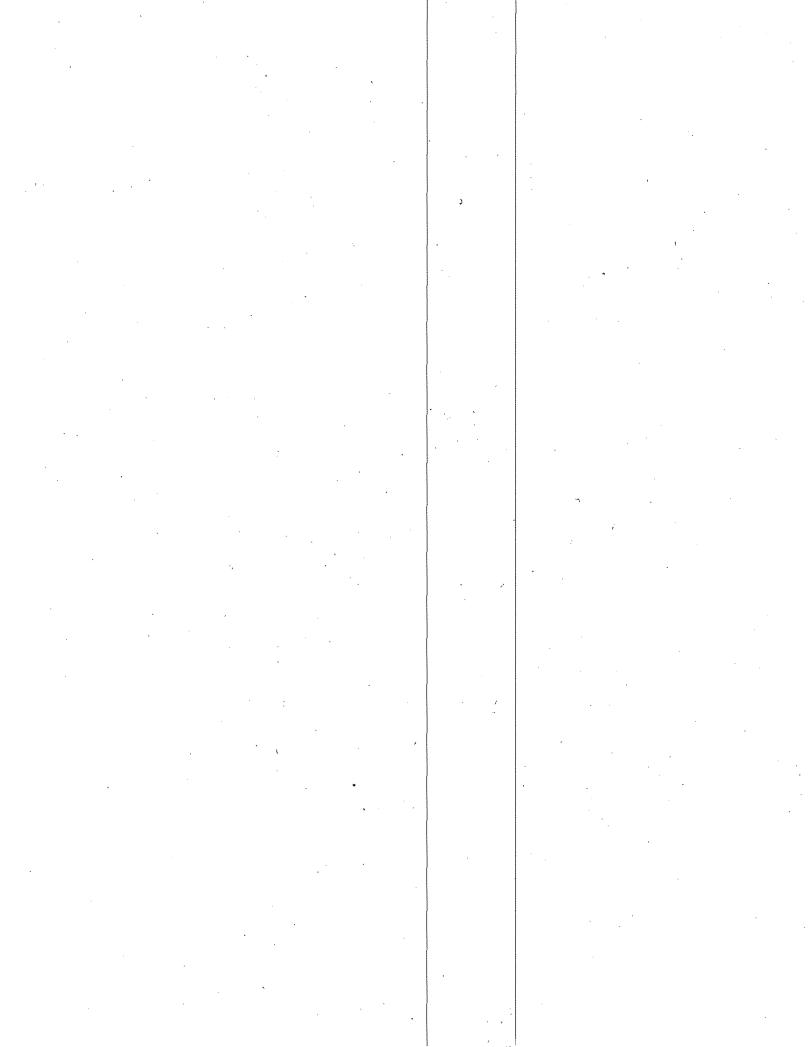
Sincerely yours,

Jeffrey T. Pallas, Chief

South RCRA Enforcement and Compliance Section

RCRA Enforcement and Compliance Branch

Enclosure



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

RCRA COMPLIANCE INSPECTION REPORT

1) INSPECTOR AND AUTHOR OF REPORT

Laurie Benton DiGaetano, Environmental Engineer

2) FACILITY INFORMATION

Air Products and Chemicals, Inc. 4575 Highway 90 East Pace, FL 32571

EPA ID # FLD 008 155 673

3) RESPONSIBLE OFFICIAL

Mr. Donald Emert Plant Manager

4) <u>INSPECTION PARTICIPANTS</u>

Richard Sroufe, Air Products
Reba Heath, Air Products
Lisa Cich, Air Products
Terry Wells, FDEP Northwest District
Bill Kellenberger, FDEP Northwest District
Morgan Leibrandt, FDEP Tallahassee
Laurie Benton DiGaetano, USEPA Region IV

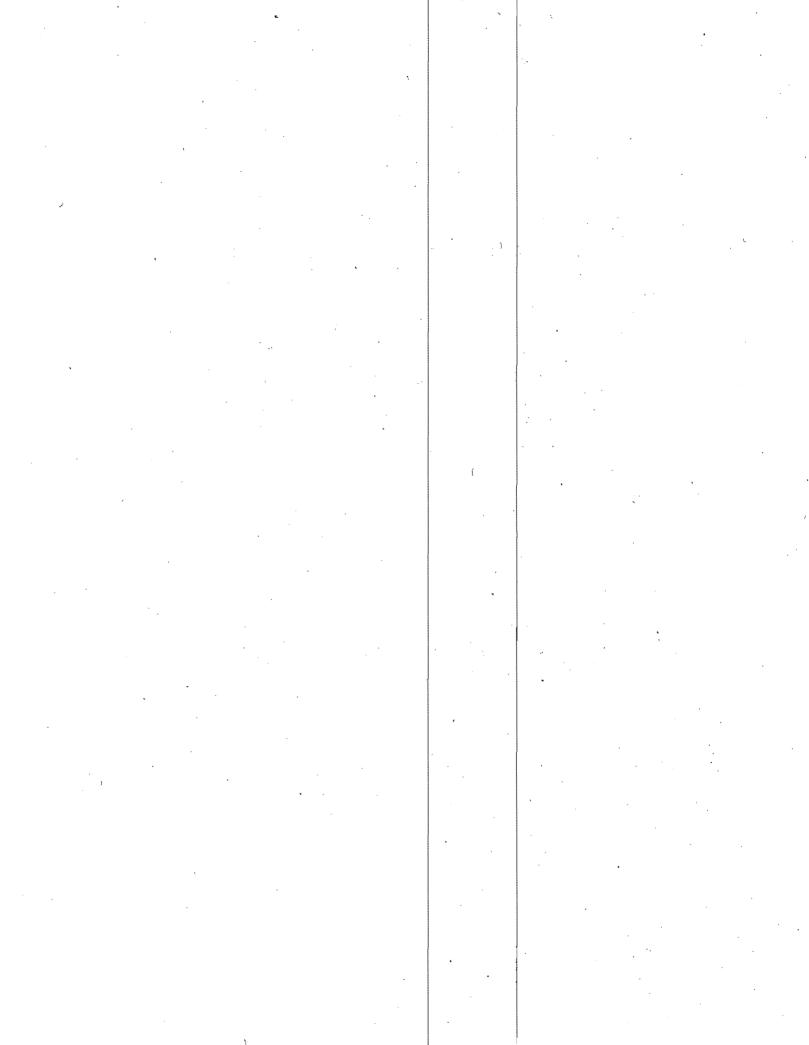
5) DATE OF INSPECTION

December 11-12, 2000

6) > APPLICABLE REGULATIONS

40 C.F.R. Parts 260-270, RCRA Sections 3005 and 3007; Florida Administrative Code Chapter 62-730.

Air Products and Chemicals, Inc. RCRA Inspection Report December 11-12, 2000



7) PURPOSE OF INSPECTION

To conduct a Compliance Evaluation Inspection (CEI) of Air Products and Chemicals, Inc. (Air Products) as required under 3007 of the Resource Conservation and Recovery Act (RCRA), and to evaluate the facility's compliance status with applicable RCRA regulations.

8) FACILITY DESCRIPTION AND PROCESS SUMMARY

Air Products was founded in 1940 to produce gases, including oxygen, nitrogen, and argon from air. The company's corporate headquarters are in Allentown, Pennsylvania, with operations in 29 countries and 14,500 employees worldwide. Air Products' Pace, Florida facility uses natural gas and other raw materials at this facility to manufacture chemicals such as ammonia, ammonium nitrate, amines, methanol, liquid hydrogen, and nitric acid.

Air Products purchased the 1,300 acre complex near Pace, Florida in 1969. Approximately 800-900 acres of the property is used for chemical manufacturing, and much of the remaining area is maintained as a wildlife sanctuary. The company operates at this location 24 hours per day with 200 employees, who work on 12 hour shifts. Approximately 50-60 contractors are also employed here.

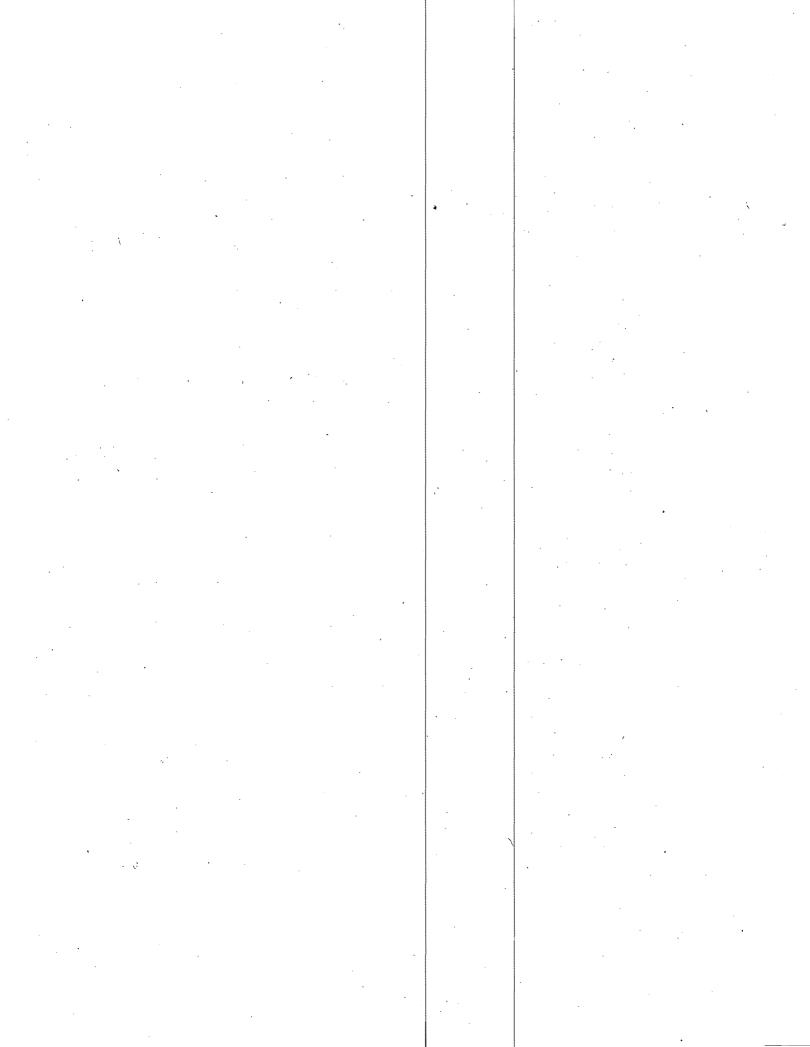
Air Products notified EPA as a Large Quantity Generator of hazardous waste. The facility is also currently operating under an EPA RCRA 3008(h) Order for remediation of several SWMUs.

9) INSPECTION FINDINGS

A. Contractor's Yard - Contractors from Watkin's Engineering and Constructors perform blasting, painting, welding, and machining operations for the maintenance of Air Products' process equipment. Before blasting the equipment for paint removal, the paint is tested for metals content. For permanent process fixtures, Air Products' contractors seal off the immediate area and ground surface with plastic prior to the start of blasting. When paint removal operations in the plant are conducted in place, the paint is removed with a water blaster. The water is filtered, and the paint chips are collected for disposal.

When it is possible, equipment is removed from the process area and brought to the Contractor's Yard for service. Paint is removed in this area with a sand blaster. According to facility personnel, the sandblast area is cleaned once every couple of years. Samples are taken from the area and tested before disposal at the Santa Rosa County Landfill.

Air Products and Chemicals, Inc. RCRA Inspection Report December 11-12, 2000



The Contractor's Yard also houses a small paint shop. During the inspection, three 5-gallon satellite accumulation area (SAA) buckets were located in the paint shop. The buckets are used to accumulate zinc primer waste, hi bill epoxy waste, and polyurethane finish coat waste.

The waste streams accumulated in the small paint shop and all other paint waste streams generated on-site are recycled at the Contractor's Yard. The wastes are brought to this area in 5-gallon buckets, and recycled in the MEK distillation unit. Air Products personnel estimated that between 85-90% of the material in the buckets is recycled, and that approximately 200 gallons of MEK is generated from the recycle machine each year. The recycling machine is operated by one of three contractors who work in the Contractor's Yard.

The recycling area was equipped with an emergency shower and eyewash station, a fire extinguisher, and a "flammable liquids" sign. Solvent distillation waste is accumulated in one 55-gallon SAA drum, and waste paint chips are accumulated in another 55-gallon drum. At the time of the inspection, three 5-gallon buckets were staged in this area to be processed. The distillation process takes approximately 5-6 hours to complete. All containers in this area were closed, labeled, and in good condition.

Empty 5-gallon buckets are collected in this area. The buckets are sent to the on-site crusher before they are shipped to the Santa Rosa Landfill. Clean-up rags are also disposed in the regular trash. Rags that are used with MEK are allowed to dry out before they are placed in the regular trash can. As a waste material, MEK is listed under 40 C.F.R. § 261.31, so the following violation was noted:

40 C.F.R. § 262.11 - A person who generates a solid waste must determine if that waste is a hazardous waste.

The sandblast and painting area also contained two semi-trailers for paint and equipment storage. The first trailer contained one full 55—gallon drum labeled "latex paint." The drum was leaking, and it had a rusty bottom. Facility personnel reported that the drum has been at this location of a couple of months.

The second trailer contained one empty drum labeled "lead contaminated dried paint chips." The trailer also contained many 1-gallon buckets of paint. Most of the paint was latex based. Personnel reported that older paint is occasionally combined here in a 55-gallon drum for disposal.

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B. QA/QC Laboratory and Environmental Lab - The QA/QC and Environmental Laboratories manage one SAA. The area is located within a small locked cage, and it contains two drums for waste accumulation. One 55-gallon drum is labeled "lab waste." The second 30-gallon drum is labeled "environmental waste." Both drums are equipped with locked funnels. Laboratory personnel stated that the lab waste primarily contains waste solvents, and the 55 gallon drum is filled about one time each quarter. Personnel also stated that the environmental waste is TKN waste, and the 30-gallon drum is filled an average of one time every six months. Both drums were located on a secondary containment unit. The drums were closed and in good condition.

The primary focus of Air Products' on-site QA/QC laboratory is to conduct GC analysis on amine samples. The laboratory also conducts tests on some methanol samples. Product samples are brought to the laboratory where they are logged in and tested. Waste containers are stored under a laboratory hood that is vented through an acetic acid scrubber. The laboratory waste is primarily made up of excess sample material from the amine product sample vials. This material is accumulate in the QA/QC SAA, and sent back into the plant for recycling through the process.

During the inspection, the QA/QC laboratory contained two 1-gallon collection buckets to accumulate waste sample material from each of the two plants. The area also contained one plastic 1 ½ gallon drum and one 1 gallon red metal container for hazardous waste accumulation. These containers were properly closed and labeled. The waste material is transferred from the small accumulation containers in the laboratory to the 55-gallon "lab waste" drum located in the SAA. The laboratory also contained several small sample jars for storing excess sample material. These jars are stored for a limited time in order to conduct future analysis, if necessary. When the re-analysis time expires, the material in these sample jars is recycled through the manufacturing process.

The primary hazardous waste stream generated in the environmental laboratory is TKN waste. During the inspection, laboratory personnel were managing one 5-gallon container for TKN waste accumulation. The container was closed, labeled, and in good condition.

The environmental laboratory also conducts testing to verify the benzene content of the Cyclo Hexyl Amine (CHA) product samples. This product is generated about twice each year, and the process generates higher concentrations of benzene during the process start-up. Laboratory testing is necessary to verify that the product does not exceed the permissible levels of benzene. During the inspection, the environmental laboratory was managing one container of CHA waste. Due to the low generation rate, the container has never been filled or disposed of.

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C. <u>Ammonia Area</u> - Air Products' generates waste solids that accumulate in the carbonate filters in the ammonia plant. The filters are cleaned out an average of once each week, and the waste material is accumulated in a SAA. During the inspection, the accumulation drum was labeled "used carbonate filters," and the drum was closed and in good condition.

Air Products also manages another accumulation point near the ammonia circulator. Ammonia wax builds up on the process equipment in this area, and Air Products personnel occasionally steam the wax build up off of the equipment and onto the concrete. This wax is shoveled up and placed into a 55-gallon drum. During the inspection, this accumulation area contained five 55-gallon drums. One drum was labeled non-hazardous methanol wax, anther labeled non-hazardous oil absorbent material. The remaining three the drums were empty new oil drums. The non-hazardous waste accumulated in this area is sent to the Springhill Regional Landfill for disposal.

One 55-gallon hazardous waste SAA drum was located outside of the ammonia plant control room. This SAA drum is used to collect waste aerosol cans, and the container was properly closed, labeled and in good condition.

- D. Methanol Area Air Products generates approximately 305 tons of ammonia each day. Two identical ammonia cooled condenser units are operated side by side in the methanol area. These units generate an oily waste water, which rises to the top of the product material. Although facility personnel were not certain of the source of oily material, the waste was analyzed and found to be similar to crude oil. Each unit accumulates the oily waste water in a 55-gallon SAA drum. The drums were labeled "used oil," and the material is burned on-site.
- E. Main Maintenance Shop Air Products conducts general facility maintenance activities in the main maintenance shop. Maintenance personnel operate on four 12 hour shifts. At the time of the inspection, the area contained one 55-gallon drum for accumulating waste aerosol cans, one for accumulating asbestos gasket material, and one for accumulating oil absorbent material. The waste aerosol cans are managed as a hazardous waste. The drum was properly closed, labeled, and in good condition.

The maintenance shop operates one parts washer, which uses citrus cleaner. According to facility personnel, no waste sludge has ever been removed from the parts washer. Metal shavings generated in the maintenance shop are sent off-site for recycling.

(Ŋ. The "Lube Section" of the maintenance shop contained five 55-gallon drums. The drums were labeled drained oil and diesel filters, oil absorbent material, used oil, used degreaser only, and used oil. The used oil accumulated in this shop is generated from pumps and air compressors. The oil absorbent materials drum is used to collect oily rags.

F. <u>90 Day Storage Area</u> - Air Products manages a less than 90 day hazardous waste accumulation area in a building labeled "waste storage." The waste storage building is equipped with emergency response equipment, emergency shower, a fire extinguisher, an alarm system, and a bermed concrete floor.

During the inspection, the hazardous waste area of this building contained nine 55-gallon drums of hazardous waste. The drums were labeled: miscellaneous aerosol cans (10/26/00), D001 methanol (10/31/00), D008 / D010 / D035 / F005 / D006 / D007 Paint (11/14/00), D008 / D010 / D035 / F005 / D006 / D007 oil based paint (12/11/00), aerosol cans (10/03/00), D008 / D010 / D035 / F005 / D006 / D007 Paint (10/26/00), D008 / D010 / D035 / F005 / D006 / D007 Solvent distillation waste (10/31/00), D006 HW solid used beads from bead blaster (10/31/00), and D006 / D007 / D008 / F005 / D010 / D035 waste oil based paint (12/11/00). The drums were all in good condition, labeled, dated, closed, and arranged with adequate aisle space.

Waste batteries that are generated throughout the plant are also accumulated in one corner of the hazardous waste storage building. The batteries are segregated by type, and they appeared to be in good condition.

The waste storage building had a specific area dedicated to non-hazardous waste storage and used oil storage. The non-hazardous wastes streams present in the building during the inspection include: amines contaminated rags, DNT contaminated wash water, drained oil and diesel filters, HNO3 contaminated insulation, balanced polymer contaminated soil, tarp contaminated with ammonia nitrate, DNT contaminated PPE, and used PCB activated carbon. The used oil storage area contained drums with the following labels: used oil, transformer oil, hydraulic soaked pads plastic, miscellaneous fuses from I-E, oily solids and TNBA contaminated soil.

In one corner of the building, Air Products accumulates waste from aerosol cans with an aerosol can puncture device. This material is managed as a hazardous waste.

In the caged area adjacent to the waste storage portion of this building, Air Products operates a drum cleaning station. RCRA empty amines drums are steam cleaned at this station before they are crushed in the drum crusher. Rinse water from the drum cleaning station is treated in the on-site treatment system.

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- G. Ammonium Nitrate Fertilizer Plant Air Products manages two SAAs at the Ammonium Nitrate Fertilizer Plant. At the time of the inspection, the first SAA contained four 55-gallon drums on a wooden pallet. The drums were labeled drained magnesium nitrate filters, and the material is managed as a non-hazardous waste. The second SAA contained seven 55-gallon drums. Two of the drums were labeled glass only, two were labeled galoryl, one was labeled drained oil and deisel filters, and one was labeled oil absorbent material. The only waste stream managed as hazardous waste at this SAA was the drum labeled miscellaneous aerosol cans.
- H. Maintenance Shop Four 55-gallon accumulation drums were found at Air Products' small maintenance shop. One drum contained hazardous waste used beads from the bead blaster, another contained hazardous waste used aerosol cans. The other drums contained oil absorbent material, and used degreaser. All drums were properly closed, labeled, and in good condition. This maintenance shop also contains a parts washer.
- I. <u>Liquid Hydrogen Terminal</u> Air Products conducts some truck maintenance activities at the Liquid Hydrogen Terminal. This area has a used motor oil tank, and accumulates oil absorbent material in a 55-gallon drum. At the time of the inspection, two 55-gallon drums were present to collect drained oil and diesel filters. One of the drums was full, and the other was empty.

The terminal also contained three 55-gallon drums of new ZEP solvent and a parts washer. The parts washer is serviced by Safety Kleen once every 6-8 weeks.

The drain system of the terminal leads to an oil water separator. Two drains are located inside the terminal, one at the fueling station, and two in the wash bay. Water from the oil/water separator is sent to the on-site water treatment system. The oil is burned on-site.

J. Amines Plant - Tanks 127 and 146 at the Amines Plant are used for storing hazardous waste generated in this process. The liquid waste is treated with CO₂ and/or an acid to raise the flash point and/or to adjust the pH in tank 127. From the 127 tank, the treated waste is sent to tank 116 for storage before it is burned on-site.

The capacity of the 127 treatment tank is less than 10,000 gallons. Tank 146 serves as a reserve storage tank for accumulation during a treatment cycle and/or when Tank 127 is full. The treated waste is sampled from Tank 127 after every treatment cycle. The batch treatment process is repeated until the treated material meets the required specifications. Air Products may treat this waste stream between once and three times each week. According to facility personnel, the tank levels are checked daily, and the tank is emptied at least once every 30 days.

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Scrubber water generated in the treatment process is reclaimed through the facility processes.

- K. <u>Paperwork Review</u> The facility's manifest records, biennial report, waste analysis records, contingency plan and training records were reviewed. The hazardous waste storage and accumulation area inspection logs indicated that Air Products is conducting weekly inspections and documenting the required information. No violations were noted during the record review.
- 10) SIGNED

Laurie Benton DiGaetano Environmental Engineer 01 | 12 | 01 Date

11) CONCURRENCE

Jeffrey T. Pallas, Chief South Enforcement and Compliance Section Date 1801

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Principal Address

7540 WINDSOR DR WINDSOR PLAZA 411 **ALLENTOWN PA 18195.**

Mailing Address

7540 WINDSOR DR WINDSOR PLAZA 411 **ALLENTOWN PA 18195**

Registered Agent Name & Address

C T CORPORATION SYSTEM 1200 SOUTH PINE ISLAND ROAD PLANTATION FL 33324 US

Officer/Director Detail

Name & Address

Title D

WOUTERS, GUY 7540 WINDSOR DRIVE SUITE 411 **ALLENTOWN PA 18195**

Title D

LENIOR, LAURENT 7540 WINDSOR DRIVE SUITE 411 **ALLENTOWN PA 18195**

Title V

DENIS, JEAN-MICHAEL 7540 WINDSOR DRIVE SUITE 411 **ALLENTOWN PA 18195**

Title T

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FEATHER-BOWMAN, JESSICA SEC 7540 WINDSOR DRIVE, SUITE 411 ALLENTOWN PA 18195

Title P

INGHAM, GEOFF 7540 WINDSOR DRIVE, SUITE 411 ALLENTOWN PA 18195

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JOHN DICKINSON PLANTATION [] PHOTO BY JERREY BOSER

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Taminco Pace Plant NH3 Release from PSV-30296

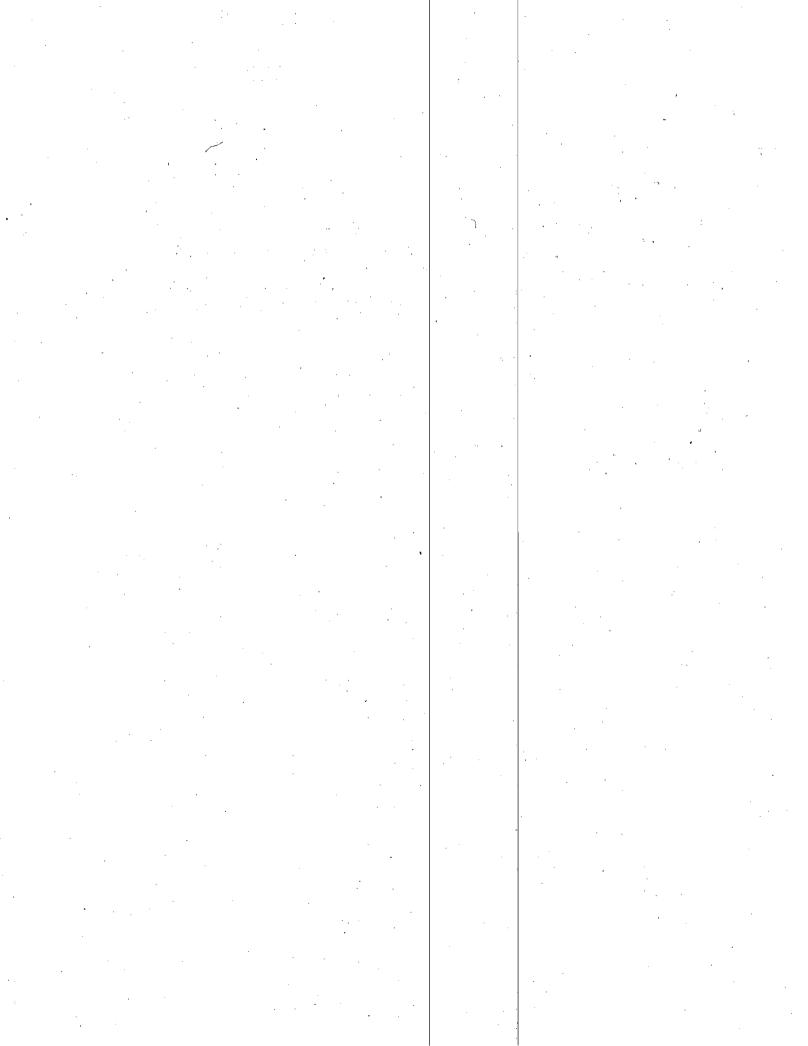
Release Timeline

30 Aug 2010 2

- 0130 Contract NH3 truck driver reported an NH3 odor at the truck unloading area.
 - a. 0130 + a few minutes, 3 Taminco employees reported to the area to determine the cause of the odor.
 - b. Operators noticed that the leak was coming from around the NH3 sphere area.
 - c. The leak was determined to be coming form the NH3 transfer line to #4 Amines. This line supplies NH3 to the #4 plant and was in service.
- 0152 NH3 transfer pump was stopped and the NH3 release was stopped.

The PSV was in demand for a total of 97 minutes. The demand started at 0015 and stopped at 0152 on 30 Aug 2010. RCA has been completed for this incident.

Jason L. Sasse



MEETING ATTENDANCE Taminco Methylamines

Tuesday, November 30, 2010

NAME	ORGANIZATION	ADDRESS	E-MAIL	TELEPHONE
Robert Bookman, EPCRA Program Manager	U.S. EPA Region 4 EPCRA Enforcement Section	61 Forsyth St, SW Atlanta, GA 30303	Bookman.Robert@epa.gov	(404) 562-9169
Andrew Porter, EPCRA Enforcement	U.S. EPA Region 4 EPCRA Enforcement Section	61 Forsyth St, SW Atlanta, GA 30303	Porter.Andrew@epa.gov	(404) 562-9184
Michiko Kono, Associate Regional Counsel	U.S. EPA Region 4 EPCRA Enforcement Section	61 Forsyth St, SW Atlanta, GA 30303	Kono.Michiko@epa.gov	(404) 562-9558
Mary Beech, EPCRA Enforcement	U.S. EPA Region 4 EPCRA Enforcement Section	61 Forsyth St, SW Atlanta, GA 30303	Beech.Mary@epa.gov	(404) 562-9669
Dwane Brunteb	Tamineo	4575 Huy 90 Fust Page FC	duane-brunfield I fac	(850) 414-437.
Dwane Brunteb Jonathan Mellar	Tamineu	3790 LA HWYLK	Jonathan Melard 2	22-5 642-3169

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Florida Department of Environmental Protection

Northwest District 160 W. Government Street, Suite 308 Pensacola, Florida 32502-5740

Herschel T. Vinyard Jr. Secretary

Lt. Governor

Druft FL 000 23 13

BY ELECTRONIC MAIL dwane.brumfield@taminco.com

In the Matter of an Application for Permit by:

Taminco Inc. Dwane Brumfield, Site Manager 4575 Highway 90 East Pace, FL. 32592 Not fariewed. Beltiner

Permit No. FL0002313 DEP File No. FL0002313-010-IW1S Santa Rosa County WBID No. 548Å

NOTICE OF DRAFT PERMIT

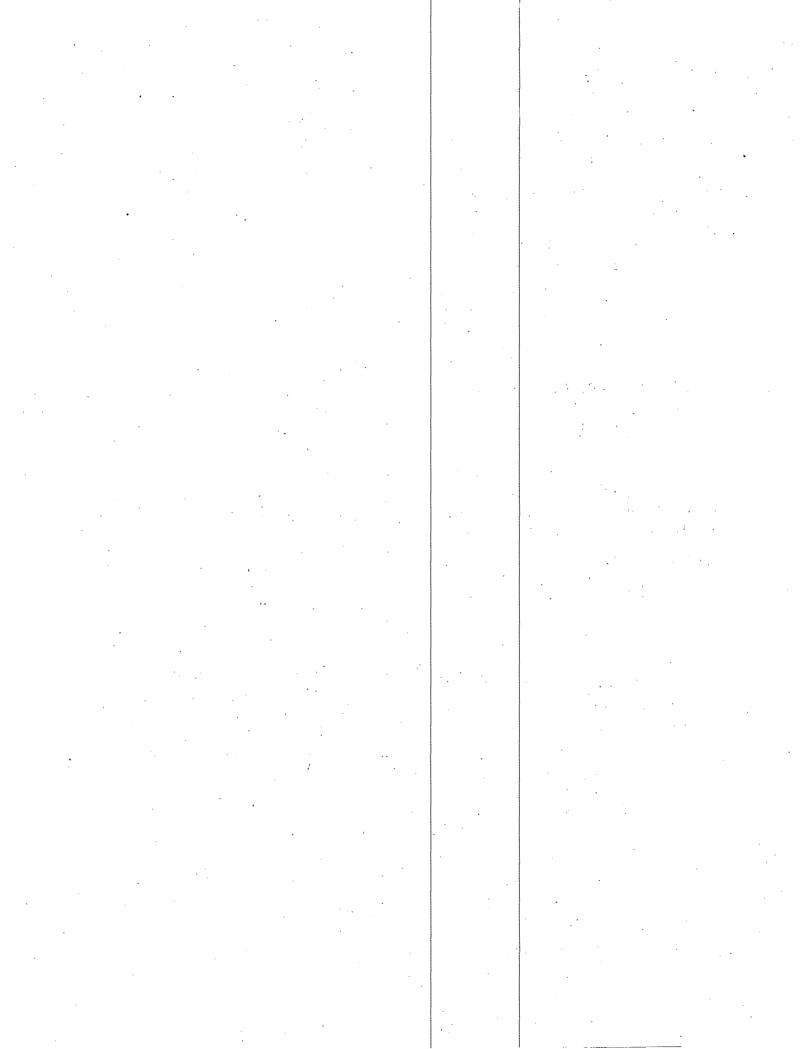
The Department of Environmental Protection gives notice of its preparation of a draft permit for the proposed project as detailed in the application specified above, for the reasons stated below.

The applicant, Taminco Inc. applied on October 28, 2011 to the Department of Environmental Protection for a permit to continue to operate their existing industrial wastewater treatment system with emergency effluent discharge to Escambia Bay and to groundwater of the surficial aquifer located at the Pace Plant, 4575 Highway 90 East, Pace, FL.

The Department has permitting jurisdiction under Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-620 and 62-660, Florida Administrative Code (F.A.C.). The project is not exempt from permitting procedures. The Department has determined that a wastewater permit is required for the proposed work.

The Department has determined that the Applicant has provided reasonable assurance that the above-described system complies with the referenced F.S. and F.A.C. chapters. The Permittee has reduced the effluent discharge from the facility to Escambia Bay to a "zero discharge" with the provision of discharging on an emergency basis only during extreme rain events (25 yr, 24 hr storm).

Under Section 403.815, Florida Statutes, and Rule 62-620.550(2), Florida Administrative Code, you (the applicant) are required to publish at your own expense the enclosed Notice of Draft Permit and Request For Public Comment. The notice must be published one time only within 30 days in the legal ad section



of a newspaper of general circulation in the area affected. For the purpose of this rule, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, Florida Statutes, in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used should be one with significant circulation in the area that may be affected by the permit.

If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant must provide proof of publication to the Department at 160 W. Government St., Suite 308, Pensacola, FL. 32502 within fourteen days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

The Department intends to issue the permit with the attached conditions unless as a result of public comment appropriate changes are made.

Any interested person may submit written comments on the proposed permitting decision of the Department or may submit a written request for a public meeting to W. Armstrong, P.E., Industrial Wastewater Section, Department of Environmental Protection, Northwest District, 160 W. Government St., Suite 308, Pensacola, Florida 32502 in accordance with rule 62-620.555 of the Florida Administrative Code. The comments or request for a public meeting must contain the information set forth below and must be received in the Northwest District Office. Comments from the permit applicant and the persons listed below must be received within 30 days of receipt of this draft permit. Comments submitted by other persons must be received within 30 days of publication of the public notice. Failure to submit comments or request a public meeting within this time period shall constitute a waiver of any right such person may have to submit comments or request a public meeting under rule 62-620.555, Florida Administrative Code.

The comments or request for a public meeting must contain the following information:

- (a) The commenter's name, address, and telephone number, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when notice of the Department's action or proposed action was received;
- (c) A statement of the facts the Department should consider in making the final decision;
- (d) A statement of which rules or statutes require reversal or modification of the Department's action or proposed action; and
- (e) If desired, a request that a public meeting be scheduled including a statement of the nature of the issues proposed to be raised at the meeting. However, the Department may not always grant a request for a public meeting.

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Taminco Inc.
Notice of Draft Permit 2012

Therefore, written comments should be submitted within 30 days of receipt of this notice, even if a public meeting is requested.

If a public meeting is scheduled, the public comment period is extended until the close of the public meeting. If a public meeting is held, any person may submit oral or written statements and data on the proposed action of the Department at the public meeting. As a result of significant public comment the Department final action may be different from the position taken by it in this draft permit.

Executed in Pensacola, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

David P. Morres

Program Administrator

Water Facilities

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this NOTICE OF DRAFT PERMIT and all copies were mailed electronically before the close of business to the listed persons.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52, Florida Statutes, with the designated deputy clerk, receipt of which is hereby acknowledged.

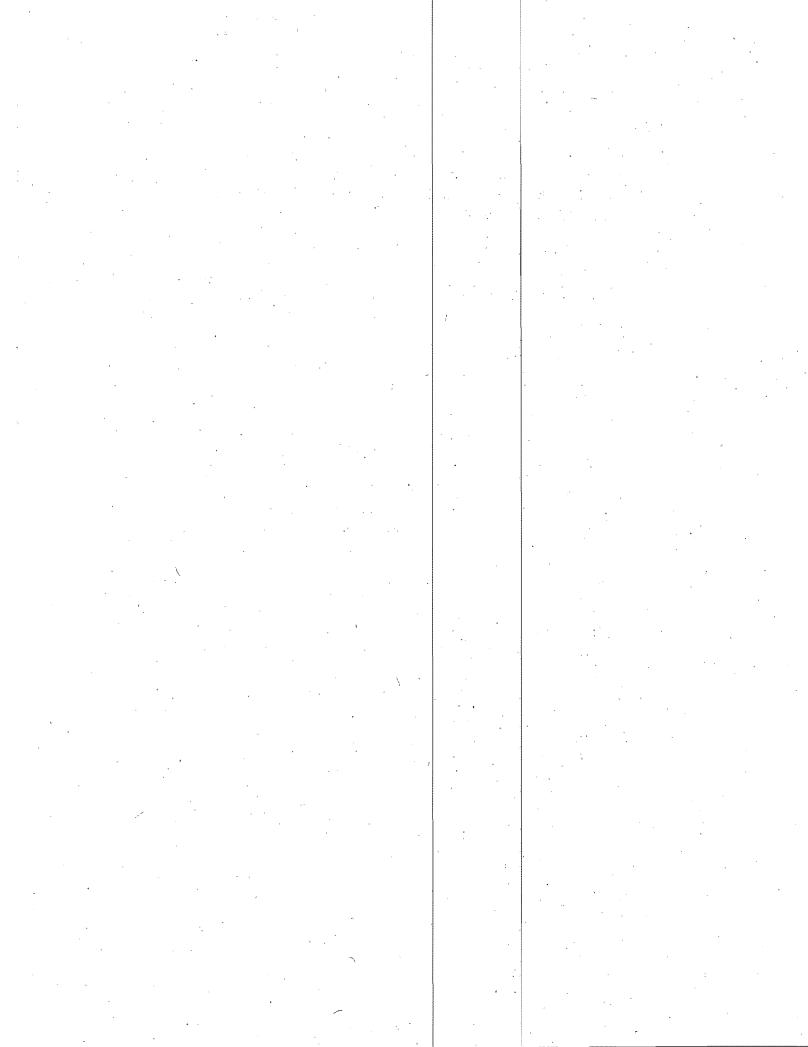
While Luungolon February 24, 2012 [Clerk] [Date]

Attach:

Public Notice of Draft Permit Draft Permit No. FL0002313 Fact Sheet for Draft Permit

Copies furnished to:

Reba Heath, Taminco (Reba.Heath@taminco.com)
Robert Lunardini, Jr., URS Corp. (robert.lunardini@urscorp.com)
Virginia Buff, U.S. EPA Region IV (Buff.Virginia@epamail.epa.gov)



Taminco Inc.
Notice of Draft Permit 2012

NWFWMD, Duncan J. Cairns (duncan.cairns@nwfwmd.state.fl.us)
Florida Fish & Wildlife (brian.barnett@fwc.state.fl.us)
U.S. Fish & Wildlife Service, Panama City (gail_carmody@fws.gov)
U.S. Corps of Engineers, Jacksonville (John.R.Hall@saj02.usace.army.mil)
National Marine Fisheries Service, Panama City (mark.thompson@noaa.gov)
Santa Rosa County Board of Commissioners (comm-salter@co.santa-rosa.fl.us)
Santa Rosa County Department of Health (anne_anderson@doh.state.fl.us)
Carol Moore, Pensacola Gulf Coast Keepers (Gckeeperrivers@cs.com)
Toni Edwards, DEP Pensacola
Santa Rosa Island Authority (Charles_peeterse@sria-fla.com)
Chair, Santa Rosa County Commissioners (comm-lynchard@santarosa.fl.gov)
Santa Rosa County Department of Health (anne_anderson@doh.state.fl.us)
Linda Young, Clean Water Network (llyoung@igc.org)
Linda Young, Clean Water Network (llyoung2@earthlink.net)

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION NOTICE OF DRAFT PERMIT

The Department of Environmental Protection gives notice of its preparation of a draft permit for Taminco Inc, Dwane Brumfield, Site Manager, 4575 US Hwy 90 E, Pace, Florida 32571.

This permit authorizes the permittee to continue to operate a 1.23 mgd industrial wastewater treatment facility which will discharge to Escambia Bay on an emergency basis only. The percolation pond system is designed to retain and treat the 25 year, 24 hour storm event. The facility is located at latitude 30°35'21.07" N, longitude 87°8'11.46" W on 4575 Highway 90 E (A), Pace, Florida 32571-2043 in Santa Rosa County.

Any interested person may submit written comments on the Department's draft permit or may submit a written request for a public meeting to W. Armstrong P.E., 160 W.Government Street, Suite 308, Pensacola, Florida 32502-5740, in accordance with Rule 62-620.555, Florida Administrative Code. The comments or request for a public meeting must contain the information set forth below and must be received in the Department's Northwest District Office within 30 days of publication of this notice. Failure to submit comments or request a public meeting within this time period shall constitute a waiver of any right such person may have to submit comments or request a public meeting under Rule 62-620.555, Florida Administrative Code.

The comments or request for a public meeting must contain the following information:

- (a) The commenter's name, address, and telephone number; the applicant's name and address; the Department permit file number; and the county in which the project is proposed;
- (b) A statement of how and when notice of the Department's action or proposed action was received;
- (c) A statement of the facts the Department should consider in making the final decision;
- (d) A statement of which rules or statutes require reversal or modification of the Department's action or proposed action; and
- (e) If desired, a request that a public meeting be scheduled including a statement of the nature of the issues proposed to be raised at the meeting.

If a public meeting is scheduled, the public comment period is extended until the close of the public meeting. However, the Department may not always grant a request for a public meeting. Therefore, written comments should be submitted within 30 days of publication of this notice, even if a public meeting is requested.

If a public meeting is held, any person may submit oral or written statements and data at the public meeting on the Department's proposed action. As a result of significant public comment, the Department's final action may be different from the position taken by it in this draft permit.

The permit application file and supporting data are available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department's Northwest District Office, 160 W.Government Street, Suite 308, Pensacola, Florida 32502-5740, at phone number (850)595-8300.

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Florida Department of Environmental Protection

Northwest District 160 W. Government Street, Suite 308 Pensacola, Florida 32502-5740 Rick Scott Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr. Secretary

INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:

Taminco Inc. Two Windsor Plaza, Suite 411 7540 Windsor Drive Allentown, PA 18195

RESPONSIBLE AUTHORITY:

Mr. Dwane Brumfield, Site Manager

FACILITY:

Taminco Inc., Pace Plant 4575 Highway 90 East Pace, FL. 32571 PERMIT NUMBER:

FL0002313 (Major) FL0002313-010-IW1S

ISSUANCE DÂTE: EXPIRATION DATE:

DRAFT DRAFT

WBID No. 548A

FILE NO.:

Santa Rosa County Latitude: 30° 34' 05" N

Longitude: 87° 09' 05" W

This permit is issued under the provisions of Chapter 403.088(2)(f) and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. The above named Permittee is hereby authorized to construct and operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

WASTEWATER TREATMENT:

The existing system is a wastewater treatment system for the industrial wastewaters generated by the Pace Plant of Taminco Inc. (Taminco). Individual production facilities operated by TAMINCO include two plants for the production of methylamines, two plants for the production of higher amines, a dimethyllaurylamine production area and a utilities area containing water treatment and boilers. TAMINCO also operates the co-generation facility owned by Gulf Power Co. Air Products and Chemicals (APCI) continues to operate the liquid hydrogen terminal and the groundwater remediation project in Area B. The liquid hydrogen terminal will have a de minimis discharge into the treatment system.

Wastewater treatment includes neutralization of the wastewater, equalization, anaerobic treatment, aerobic treatment and final percolation in the site Rapid Infiltration Basins (RIBs). Facility modifications, completed by the former owner, APCI, reduced the effluent impact on Escambia Bay of nutrients and oxygen depleting substances by eliminating effluent discharge to Escambia Bay except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events. During the last permit term, APCI constructed three (3) additional Rapid Infiltration Basins (RIBs) that substantially increased the disposal capacity of the land application system. APCI, also, shut down the methanol, ammonia, nitric acid and ammonium nitrate plants. The individual plants shutting down resulted in a reduction of process wastewater flow from 0.41 MGD to 0.22 MGD. The total design capacity remains at 1.23 MGD monthly average daily flow (MADF) with 1.23 MGD MADF discharging to the percolation pond system and an estimated 0.00 MGD MADF discharging to Escambia Bay. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

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Taminco Inc.
Pace Plant
Page 2

PERMIT NUMBER:

FILE No.:

FL0002313

FL0002313-010-IW1S

EFFLUENT DISPOSAL:

Surface Water Discharge:

The point of discharge to Escambia Bay, Class III marine waters, via Outfall D-001, is located approximately at latitude 30° 34' 05" N, longitude 87° 09' 05" W. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

Underground Injection: Not applicable.

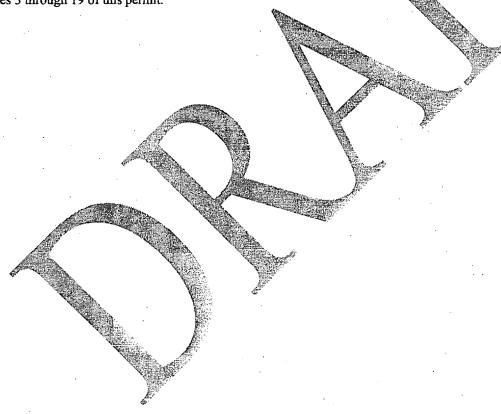
Land Application:

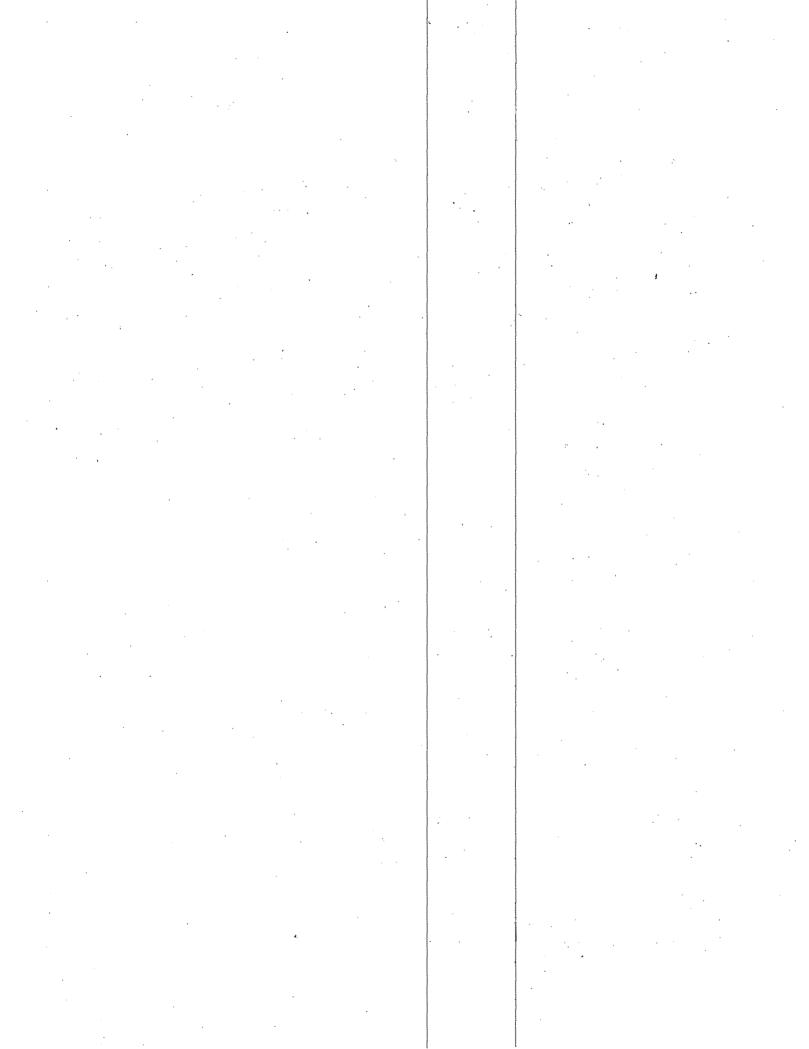
G-001, a 1.23 MGD MADF permitted discharge to 7 percolation ponds located approximately at latitude: 30° 34' 47" N,

longitude: 87° 08' 11" W

Reuse: Not applicable.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Part I through Part VIII, pages 3 through 19 of this permit.





Taminco Inc. Pace Plant Page 3 PERMIT NUMBER:

FILE No.:

FL0002313

FL0002313-010-IW1S

I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

1. The permittee is authorized to discharge from Outfall D-001, process wastewater, cooling tower blowdown, and stormwater runoff from areas associated with industrial activity, and ground water. Surface water discharges shall be limited to the amount in excess of the land application system capacity associated with 25 year, 24 hour daily rainfall event or equivalent chronic rainfall events. Such discharge shall be limited and monitored by the permittee as specified below:

Parameters	Effluent Limitations			Mo	onitoring Requirem	ents
	Monthly Average	Daily Maximum	Other	- Freq.	Sample Type	Sample Location
Flow (MGD)	Report	Report	na 👯	Continuous	Recorder	EFF-1
pH (SU)	na	na	6.5 to 8.5	Daily 🔧	🔈 Gr <u>a</u> b	EFF-1
Total Ammonia (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrate (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrogen, Total (MG/L)	Report	Report	A	1/week	Calculated	EFF-1
Total Phosphorus (MG/L as P)	Report	Report	Report (lbs/day as P)	1/week	Grab	· EFF-1
Total Suspended Solids (MG/L)	30	60 🦨	Report (lbs/day)	1/week	G rab	EFF-1
CBOD ₅ , (MG/L)	30	60	Report (lbs/day)	🔈 l/week	Grab	EFF-1
Total Recoverable Copper (UG/L)	na	na	Max 3.7 ug/l wqs	"l∜week	Grab	EFF-1
Rainfall (inches)	na	na	Report	Daily	24 Hour Total	
Whole Effluent Toxicity		<i>y</i>	See below			
OCPSF 40CFR414.91 Parameters		VOA.	See below			

OCPSF 40CFR414.91 Parameters - If there is a discharge the permittee shall initiate the series of tests described below to evaluate the compliance with effluent limitations of 40CFR414.91 (OCPSF) for the discharge of toxic pollutants from Outfall D-001. These tests are required one time per calendar year for all discharge events.

The discharge must not exceed the concentration of the toxic pollutants listed below:

	DEP RECORDING TO THE TAIL	346-421-13				
Outfall D-001	Discl	narge Limitat	ions	Monitor	ing Require	ments
40CFR414.91 (OCPSF)	4	*				,
Limits 🔾 📜	% <u>#</u>					
Parameter	STATE OF THE PARTY	a Daily	Other	Monitoring	Sample	Sample
(all units mg/l-unless noted otherwise)	Average	Maximum		Frequency	Туре	Point
l,l,l:Trichloroethane	0.0038	0.0097	na	l/year	Grab	EFF-1
1,1,2-Trichloroethane	0.0038	0 .0097	na	1/year	Grab	EFF-1
l, l'-Dichloroethane	0.0039	0.0106	na	1/year	Grab	EFF-1
1,1-Dichloroethylene	0.0029 🧳	0.0045	na	1/year	Grab	EFF-1
1,2,4-Trichlorobenzene	0.0122	0.0250	na	1/year	Grab	EFF-1
1,2-Dichlorobenzene	0.0138	0.0292	na	1/year	Grab	EFF-1
1,2-Dichloroethane	0.0122	0.0377	na	l/year	Grab	EFF-1
1,2-Dichloropropane	0.0274	0.0411	na	1/year	Grab	EFF-1
1,2-trans-Dichloroethylene	0.0038	0.0097	na	l/year	Grab	EFF-1
1,3-Dichlorobenzene	0.0055	0.0079	nຸa	1/year	Grab	EFF-1
1,3-Dichloropropylene [1,3-Dichloropropene]	0.0052	0.0079	. na	1/year	Grab	EFF-I
1,4-Dichlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
2,4-Dichlorophenol	0.0070	0.0200	na	l/year	Grab	EFF-1
2,4-Dimethylphenol	0.0032	0.0064	na ·	1/year	Grab	EFF-1
	40CFR414.91 (OCPSF) Limits Parameter (all units mg/lunless noted otherwise) 1,1,1 Trichloroethane 1,1-Dichloroethane 1,1-Dichloroethane 1,2-Dichloroethylene 1,2-Dichlorobenzene 1,2-Dichloropropane 1,2-Dichloropropane 1,3-Dichloropropylene 1,3-Dichloropropylene [1,3-Dichloropropylene] 1,4-Dichlorobenzene 2,4-Dichlorobenzene	## August 1.1-Dichloroper Parameter (all units mg/l-unless noted otherwise) 1.1.1-Trichloroethane	AOCFR414.91 (OCPSF) Limits	AOCFR414.91 (OCPSF) Limits Parameter (all units mg/lunless noted otherwise) Average Maximum Otherwise)	Parameter (all units mg/l-unless noted otherwise)	AOCFR414.91 (OCPSF) Limits Parameter (all units mg/l-unless noted otherwise) Daily Maximum Other Monitoring Frequency Type

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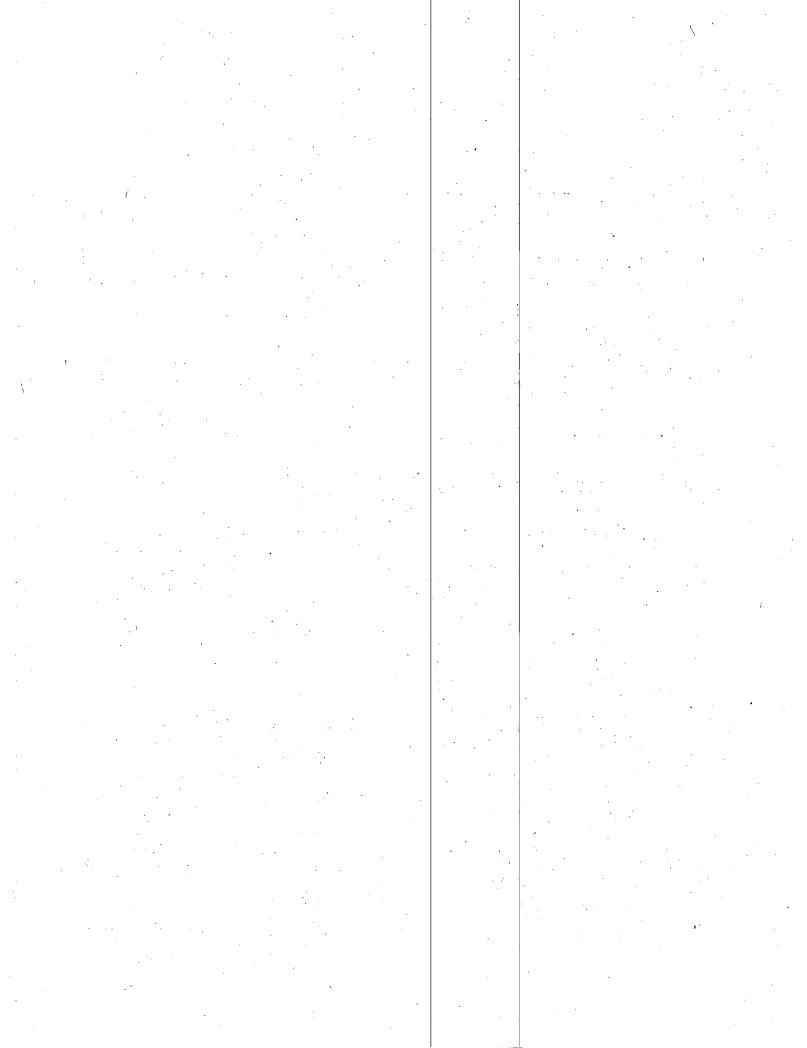
PERMITTEE:
Taminco Inc. Pace Plant
Page 4

PERMIT NUMBER: FILE No.:

FL0002313 FL0002313-010-IW1S

I.A.1 continued:

Outfall D-001	Discharge Limitations		Monitoring Requirements			
40CFR414.91 (OCPSF)					٠.	,
Limits		-				
Parameter	Monthly	Daily	Other	Monitoring	Sample	Sample
(all units mg/l unless noted	Average	Maximum	,	Frequency	Type	Point
otherwise) 2,4-Dinitrophenol	0.0127	0.0220		l/year	Grab	EFF-1
2,4-Dinitrophenor	0.0127	0.0220	na	1/year	Grab	EFF-1
2,6-Dinitrotoluene	0.0202	0.1147	na		Grab	EFF-1
2-Chlorophenol	0.0055	0.0175	na	l/year	Grab	
<u> </u>		· · · · · · · · · · · · · · · · · · ·	na	/1/year	2000 (F. 1000)	EFF-1
2-Nitrophenol 3,4-Benzofluoranthene	0.0073	0.0123	na na	1/year	Grab	EFF-1
[benzo(b)fluoranthene]	0.0041	0.0109	na	1/year	Grab	EFF-1
4,6-Dinitro-o-Cresol	0.0140	0.0495	na	1/year	Grab	EFF-1
4-Nitrophenol	0.0129	0.0222	্ৰ- ana	1/year	Grab	EFF-1
Acenaphthene	0.0039	0.0106	na	l/year.	Grab	EFF-1
Acenaphthylene	wqs	wqs	*0.031 µg/(**	1/year	Grab	* EFF-1
Acrylonitrile	0.0172	0.0433	na	l/year	Grab	EFF-I
Anthracene	wqs	wgs	*0.031 μg/l#	1/year	Grab (EFF-1
Benzene	0.0066	0.0243	na na	l/year	Grab	EFF-1
Benzo(a) Anthracene	wqs	wqs	*0.031 μg/l*	1/year	Grab	EFF-1
Benzo(a) Pyrene	wqs	wqs 🦫	*0:031 µg/l*	l/year	Grab	EFF-1
Benzo(k) Fluoranthene	wqs	wqs 🖔	*0.031 μg/1 [*]	1/year	Grab	EFF-1
bis(2-Ethylhexyl)Phthalate	0.0184	0.0499	na na	√l/year	Grab	EFF-1
Carbon Tetrachloride	0.0032	0.0068	na na	1/year	Grab	EFF-1
Chlorobenzene	0.0027	0.0050	na na	1/year	Grab	EFF-1
Chloroethane	0.0186	0,0479	na na	1/year	Grab	EFF-1
Chloroform	0.0038	0,0082	na	1/year	Grab	EFF-1
Chrysene	wqs	Wqs	****0.031 μg/l*	1/year	Grab	EFF-1
Di-n-Butyl Phthalate	0.0048	0.0102	na	l/year	Grab	EFF-1
Diethyl Phthalate	0.0145	0.0363	na	1/year	Grab	EFF-1
Dimethyl Phthalate	0.0034	0.0084	na	l/year	Grab	EFF-1
Ethylbenzene	0.0057	7 0.0193	na	l/year	Grab	EFF-1
Fluoranthene	0.0045	0.0122	′ na	1/year	Grab	EFF-1
Fluorene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Hexachlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Hexachlorobutadiene	0.0036	0.0088	na	l/year	Grab	EFF-1
Hexachloroethane	0.0038	0.0097	na	I/year	Grab	EFF-I
Methyl Chloride	0.0154	. 0.0340	na	I/year	Grab	EFF-1
Methylene Chloride	0.0072	0.0159	na	1/year	Grab	EFF-1
Naphthalene	0.0039	0.0106	na	1/year	Grab	EFF-1
Nitrobenzene	0.0048	0.0122	na	1/year	Grab	EFF-1
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Taminco Inc. Pace Plant Page 5 **PERMIT NUMBER:**

FILE No.:

FL0002313

FL0002313-010-IW1S

I.A.1. continued:

40CFR414.91 (OCPSF) Limits	Discharge Limitations		tions	Monitori	ng Requirem	ents
Parameter (units mg/l unless noted)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
Phenanthrene .	wqs	wqs	*0.031 µg/l#	l/year	Grab	EFF-1
Phenol	0.0027	0.0047	na	l/year	Grab	EFF-1
Pyrene	wqs	wqs	*0.031·μg/l*	l/year	Grab	EFF-1
Tetrachloroethylene	wqs	wqs	Mx 8.85 μg/l*	1/year	Çrab	EFF-1
Toluene	0.0047	0.0143	na	1/year	Grab	EFF-1
Total Recoverable Cyanide	wqs	wqs	Max 1.0 μg/l	1/year	Grab	EFF-1
Total Recoverable Chromium	wqs	wqs	Max 50 μg/l	1∛year 🔪 🤄	Grab	EFF-1
Tot Rec Copper (UG/L)	wqs	wqs	Max 3.7 ug/l	1/week	Grab	EFF-1
Total Recoverable Lead	wqs	wqs	Max 8.5 μg/k	\ \ \ \/year	Grab	EFF-1
Total Recoverable Nickel	wqs	wqs	Max 8.3 µg/l	1/year	Grab.	EFF-1
Total Recoverable Zinc	wqs	wqs	Max 86.0 μg/l	1/year	Grab 🤻	≦^EFF-1
Trichloroethylene [ethene]	0.0038	0.0097	/ ñà	1/year	Grab	EFF-1
Vinyl Chloride	0.0186	0.0479	na.	A/year	Grab	EFF-1

^{*} See Part # I.A.7.

Notes: wqs - Those parameters with the maximum concentrations marked as "wqs" are limited by the more stringent water quality standard as indicated in the "Other" column. [62-302.530(28),(30),(57),(9),(17),(37),(64),(69), FAC]

2. Effluent samples for Outfall # D-001 shall be taken at locations listed in Permit Condition I.A.1. and described below:

Monitoring Location (Sample Point) WAFR Site Number	Description of Monitoring Location
EFF-1	Alpha Pond Parshall Flume Discharge

- 3. If a discharge to Escambia Bay occurs, the permittee shall submit a report to the Department within 30 days following the discharge as specified in Section I.E. The report shall include the cause and nature of the discharge, the duration of the discharge and the total gallons discharged. The report shall include rainfall measurement data and calculations to demonstrate that the discharge was due to the rainfall event.
- 4. There shall be no discharge of floating solids or visible foam in such amounts as to form nuisances. [62-302.500(1), FAC]
- 5. The discharge shall not cause a visible sheen defined as iridescence, nor shall be present so as to cause taste or odor, or otherwise interfere with the beneficial use of receiving water. [62-302.530(50)(b), FAC]
- 6. The pH shall be monitored as required by I.A.1.. The pH values shall not deviate outside the range of 6.5 to 8.5 standard units more than 1% of the time in any calendar month and no individual excursion shall exceed 60 minutes. An "excursion" is an unintentional and temporary incident in which the pH value of discharged wastewater exceeds the range set forth in the permit.
- 7. 62-302.530, F.A.C. limits the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs): Acenaphthylene, Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi)perylene, Benzo(k) Fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3cd)pyrene, and Phenanthrene to < 0.031 ug/l on an annual average basis. As they were in the last permit, the additional PAHs are added to this list to be < 0.031 ug/l: Anthracene, Fluorene, and Pyrene.</p>
- 8. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.A. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge with the receiving water.
- 9. Reopener Clause: The permit may be reopened pursuant to rule 62-620.325, FAC to adjust effluent limitations or monitoring requirements if information received indicates a need for different limitations or monitoring requirements, such as but not limited to results from water quality studies, TMDLs or DEP approved changes in water quality standards.

^{# -} Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12-month rolling annual average basis. [62-302.530 Note (1), FAC]

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10. Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12 month rolling annual average basis. [62-302.530 Note (1),FAC]

- 11. For those parameters for which monitoring is required once per month or less frequently than once a month, if the single sample exceeds the monthly average limit, additional samples may be taken to demonstrate compliance with the monthly average limits. Otherwise, the single sample shall be used to calculate the monthly average and daily maximum. If more than one sample is taken in a given month, the monthly average of all samples taken during that month shall be reported.
- B. Underground Injection Control Systems Not applicable

C. Land Application Systems

1. The Discharge from Land Application System <u>G-001</u> shall be limited and monitored by the Applicant as specified below at the monitoring point related to the discharge location to the percolation pond system in use at the time of sampling which could be EFF-3 or EFF-4:

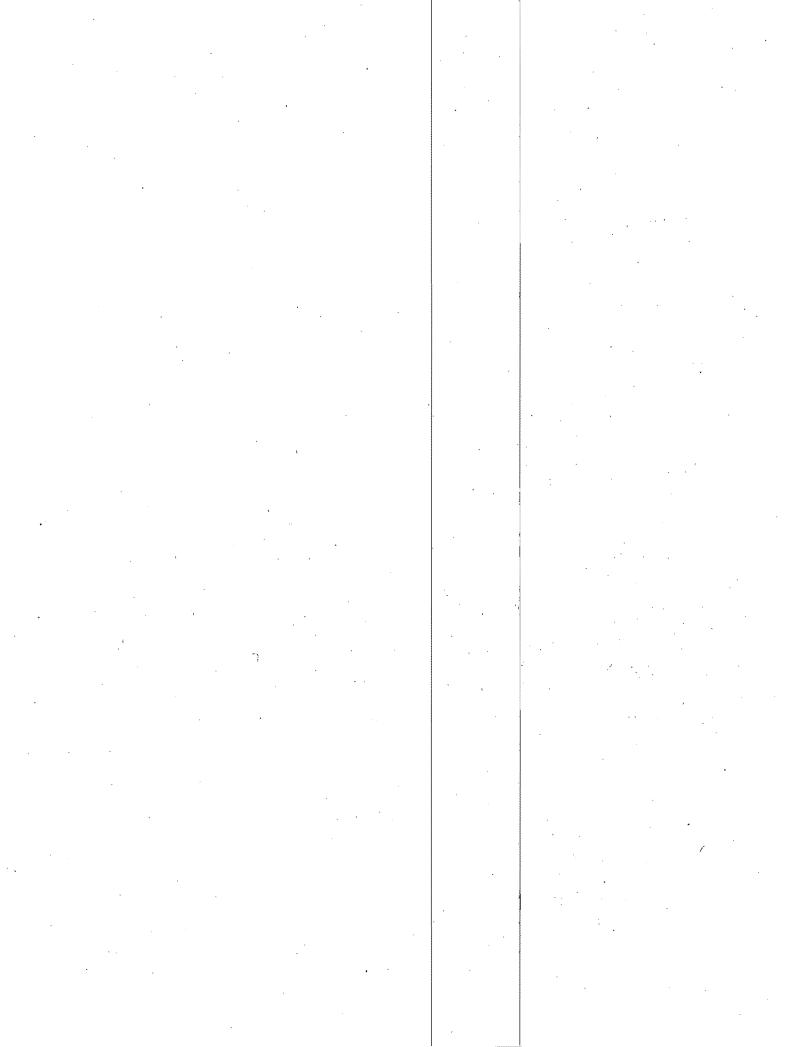
G-001 (WAFR 37240)	Discharge Limitations			M	onitoring Requirement	S
Parameters (units)	Mo Avg.	Daily Max.	Other -specify	Frequency	Sample Type	Sam Pnt
2,4-Dinitrotoluene, (μg/l)	na	Report	na 🧳	1/month	24 hour composite	EFF-3, 4
2,6-Dinitrotoluene, (μg/l)	па	Report	∠na	ू l/month	24 hour composite 🧽	EFF-3, 4
CBOD ₅ , (mg/l)	па	Report	na	/I/month	24 hour composite	EFF-3, 4
Chemical Oxygen Dem, COD, (mg/l)	па	Report	na 🔾 📜	1/month	24 hour composite	EFF-3, 4
Flow, (MGD)	Report	Report	na 📜	Continuous	Recorder	EFF-3, 4
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Organic Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4
pH, (standard units)	na	na	Report min & max	5/week	Grab	EFF-3, 4
Total Ammonia, (mg/l as N)	Report	Report 🐪	na 🥍 🛴	weekly	24 hour composite	EFF-3, 4
Total Dissolved Solids TDS, mg/l	Report	Report 🐫	na	weekly	24 hour composite	EFF-3, 4
Tot. Kjeldahl Nitr. TKN, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Nitrogen, (mg/l as N)	Report.	Report	na	weekly	Calculated	EFF-3, 4
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	24 hour composite	EFF-3, 4

- 2. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.C.1. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge to the land application system:
- 3. Effluent samples for disposal system # G-001 shalf be taken at the monitoring site locations listed in Permit Condition I.C.1. described below:

Monitoring Location (Sample Point)	Description of Monitoring Location				
EFF-3	Bravo Pond discharge to percolation ponds				
EFF-4	Echo Pond discharge to percolation ponds				

D. Other Methods of Disposal or Recycling

- 1. There shall be no discharge of industrial wastewater from this facility to ground water or surface waters, except as authorized by this permit.
- E. Other Limitations and Monitoring and Reporting Requirements
- The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" is available at http://www.dep.state.fl.us/labs/guidance/index.htm.



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The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:

- a) The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
- b) The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide a MDL, which is equal to or less than the applicable water quality criteria stated in 62-302 F.A.C.; and
- c) If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantification limits, the permittee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs and PQLs for any approved analytical method. Approval of alternate laboratory MDLs and PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is in accordance with 40 CFR 136.

- 2. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method to assure compliance with applicable water quality standards and effluent limitations in accordance with 40 CFR Part 136. All monitoring shall be representative of the monitored activity.
- Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Northwest District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

	\%\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\		
	REPORT Type on DMR	Monitoring Period	DMR Due Date
	William Street		
	Monthly or Toxicity	first day of month - last day of month	28th day of following month
	Quarterly	January 1 - March 31	April 28
		April 1 – June 30	July 28
		July (September 30	October 28
		October 1 - December 31	January 28
,	Semi-annual	January 1 - June 30	July 28
8	THE SECOND SECON	July 1 – December 31	January 28
		January 1 - December 31	January 28
	\$2.0000000m		

DMRs shall be submitted for each required monitoring period including months of no discharge.

The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department at the address specified below:

Florida Department of Environmental Protection

Wastewater Compliance Evaluation Section, Mail Station 3551

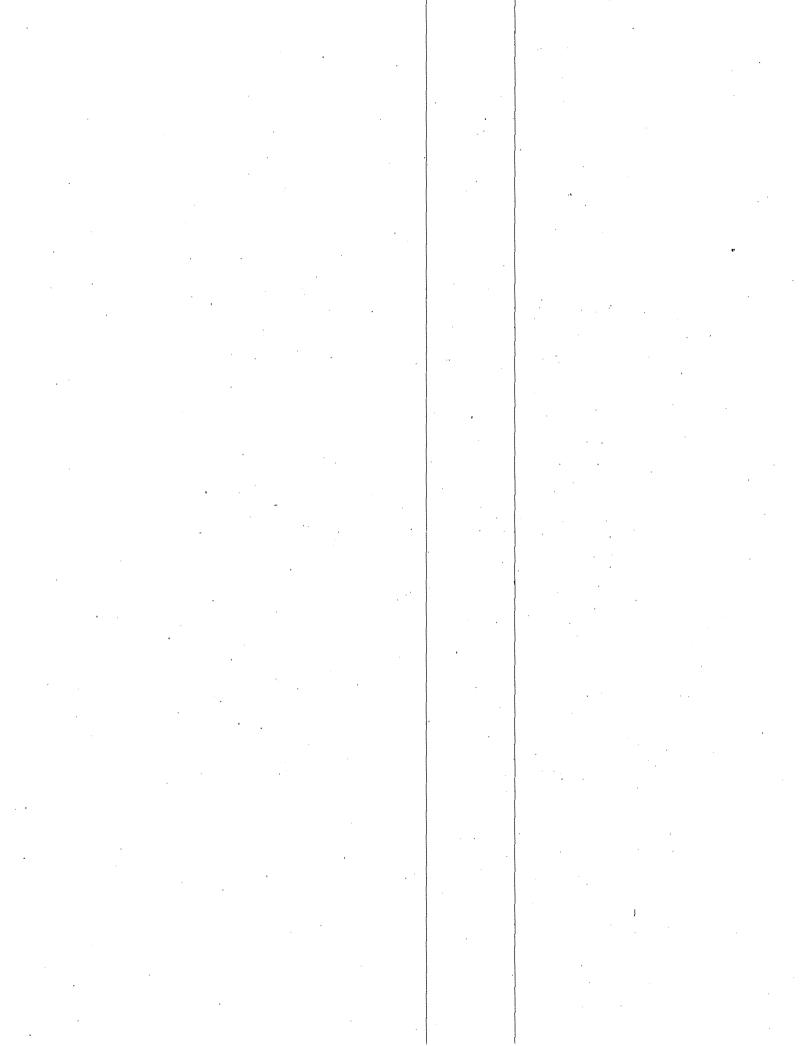
Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

4. Unless specified otherwise in this permit, all other reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to, as appropriate, the Northwest District Office of the Department at the address specified below:

Florida Department of Environmental Protection Northwest District Office 160 W. Government St., Suite 308 Pensacola, FL 32502-5740



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- 5. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C
- The permittee shall provide safe access points for obtaining representative samples which are required by this permit.
- 7. If there is no discharge on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.
- 8. Any bypass of the treatment facility which is not included in the monitoring specified in sections I.A, I.B, I.C, or I.D, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.

F. Whole Effluent Toxicity Testing

1. The permittee shall comply with the following requirements to evaluate acute whole effluent toxicity of the discharge from outfall D-001.

a. Effluent Limitation

(1) In any routine or additional follow-up test for acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent. [Rules 62-302.200(1), 62-302.500(1)(a)4., 62-4.244(3)(a), and 62-4.241, F.A.C.]

b. Monitoring Frequency

(1) Routine toxicity tests shall be conducted annually, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.

c. Sampling Requirements

(1) All tests shall be conducted on a single grab sample of final effluent.

d. Test Requirements

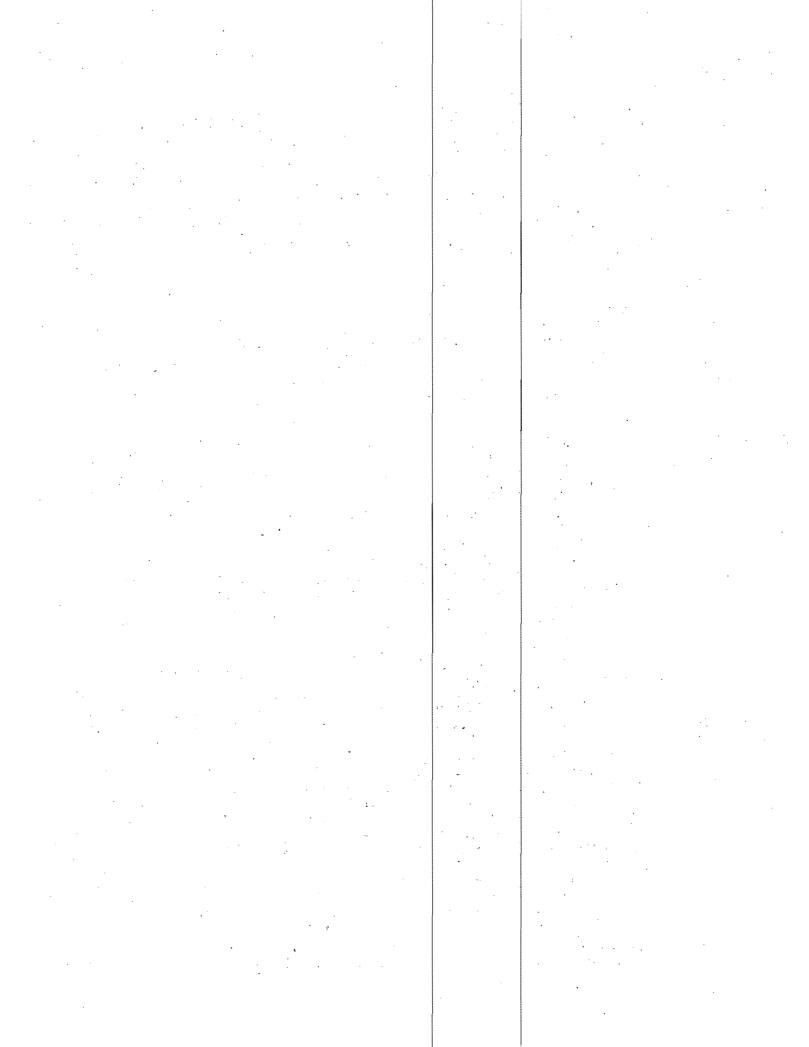
- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12:5% effluent.
- (2) The permittee shall conduct 96-hour acute stanc renewal multi-concentration toxicity tests using the daphnid, Ceriodaphnia dubia, and the bannerfin shiner. Cyprinella leedsi, concurrently.
- (3) All test species, procedures and quality assurance criteria used shall be in accordance with Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition, EPA-821-R-02-012. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct acute toxicity testing in accordance with the revised method.
- (4) The control water and dilution water shall be moderately hard water as described in EPA-821-R-02-012, Table 7.

e. Quality Assurance Requirements

- (1) A standard reference toxicant (SRT) quality assurance (QA) acute toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly acute toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
- (2) If the mortality in the control (0% effluent) exceeds 10% for either species in any test, the test for that species (including the control) shall be invalidated and the test repeated. The repeat test shall begin within 14 days after the last day of the invalid test.
- (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 10% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
- (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the concentration-response relationship, as required by EPA-821-R-02-012, Section 12.2.6.2., and included with the bioassay laboratory reports.

f. Reporting Requirements

(1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:



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- (a) Routine Test Results: If an LC50 > 100% effluent occurs in the test for the test species, ">100%" shall be entered on the DMR for that test species. If an LC50 < 100% effluent occurs, the calculated LC50 effluent concentration shall be entered on the DMR for that test species.
- (b) Additional Follow-up Test Results: For each additional test required, the calculated LC50 value shall be entered on the DMR for that test species.
- (2) A bioassay laboratory report for the routine test shall be prepared according to EPA-821-R-02-012, Section 12, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
- (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-012, Section 12, and mailed within 30 days after the last day of the second valid additional follow-up test
- (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
- (5) The same bioassay data shall not be reported as the results of more than one test.
- (6) All bioassay laboratory reports shall be sent to:
 Florida Department of Environmental Protection
 Northwest District Office
 160 Government Street, Suite 308
 Pensacola, Florida -5740

g. Test Failures

- (1) A test fails when the test results do not meet the limits in 1.a.(1).
- (2) Additional Follow-up Tests:
 - (a) If a routine test does not meet the acute toxicity limitation in 1.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 1.d.
 - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed.
 - (c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12.5% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be statistically analyzed according to the procedures in EPA-821-R-02-012.
- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
 - (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
 - (b) The Department shall review and approve the plan before initiation.
 - (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
 - (d) Progress reports shall be submitted quarterly to the Department at the address above.
 - During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 1.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 1.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-012, a repeat test shall be initiated within 14 days after the last day of the invalid routine test.
 - (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 1.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 14 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for whole effluent toxicity failures. [62-4.241, 62-620.620(3)]

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II. **Industrial Sludge Management Requirements**

Basic Management Requirements

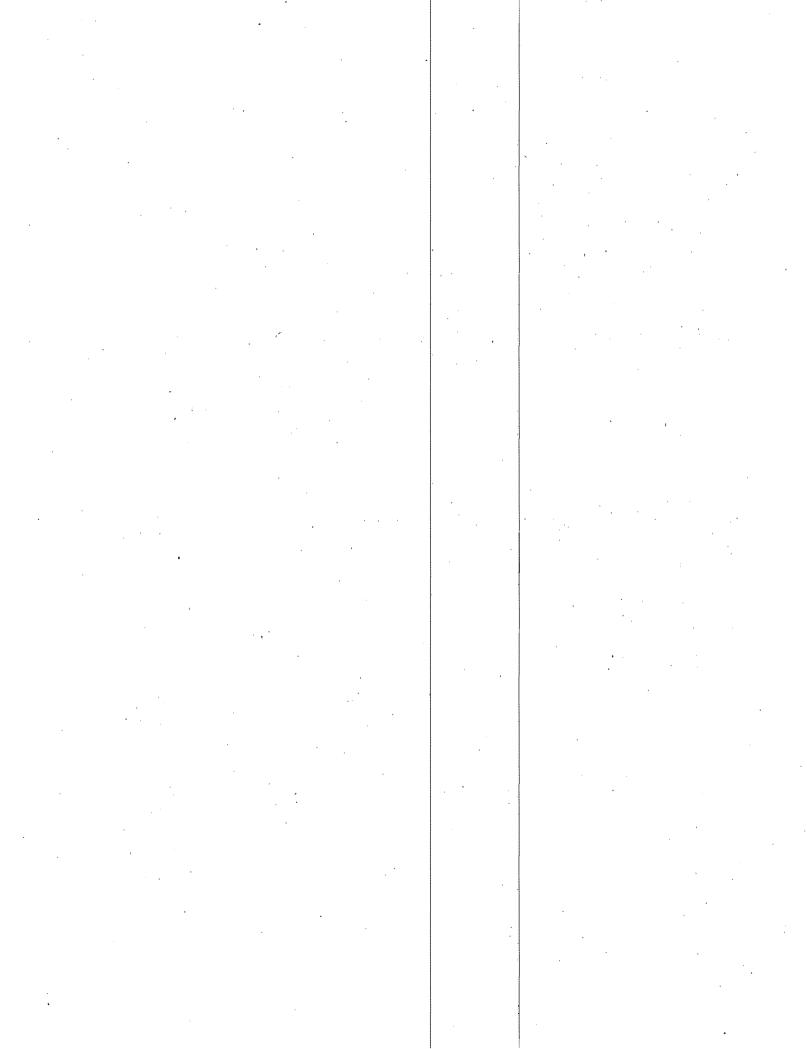
- The method of disposal for sludge or residuals generated by the treatment of industrial wastewaters by this facility is to a 1. Class I solid waste landfill.
- 2. Disposal of sludge in a solid waste management facility permitted by the Department shall be in accordance with the requirements of Chapter 62-701, F.A.C.
- The permittee shall keep records of the amount of sludge or residuals disposed, transported or incinerated in dry tons/day. If 3. a person other than the permittee is responsible for sludge transporting, disposal, or incineration, the permittee shall also keep the following records:
 - name, address and telephone number of any transporter, and any manifests or billiof lading used.
 - name and location of the site of disposal, treatment, or incineration
 - name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.

III. Groundwater Monitoring Requirements

- 1. During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit and the approved ground water monitoring plan.
- 2. The following monitoring wells are included in the ground water monitoring plan for the Plant A and Plant B wastewater treatment pond areas.

				Votar negotia Pilipa.	A 1.0	,632°		
Well Name	Old ID	WAFR No.	Depth	Aquifer	Well Type	New/Existing		
,		Plant Area A Monitoring Wells						
MWB-A1	A-1	1578	90	Surficial	Background	Existing		
MWI-A2	A-2	1577	73	Surficial	Intermediate	Existing		
MWC-A3	A-3	1576	64	Surficial	Compliance	Existing		
	Plant Area B Monitoring Wells							
MWB-1	Na 🥬 🖳	46352	100	Surficial - Shallow	Background	Existing		
MWB-PW5	∕PW-5	46353	265	Surficial - Deep	Background	Existing		
MWI-B1	B-l	1 <i>57</i> 5	100	Surficial Shallow	Intermediate	Existing		
MWI-B5	B-5	1568	355	Surficial - Shallow	Intermediate	Existing		
MWI-E5	7E-5	1570	48	Surficial - Shallow	Intermediate	Existing		
MWI-PW7	PW-7	46354	,	Surficial - Deep	Intermediate	Existing		
MWI-E1(S)	E-1(S) ૱ - [46359	48	Surficial - Shallow	Intermediate	Existing		
MWĮ-E2(S)	E-2(S)	46360	42	Surficial - Shallow	Intermediate	Existing		
MWI-E6(S)	E-6(S)	46361	37	Surficial - Shallow	Intermediate	Existing		
MWC-B4	B-4	1569	25	Surficial - Shallow	Compliance	Existing		
MWC-E3	₹ (@E ₂ 3 /	1572	35	Surficial - Shallow	Compliance	Existing		
MWC-2	Na	46358	160	Surficial - Deep	Compliance	Existing		
MWC-303	SW-303	48229	150	Surficial - Deep	Compliance	Existing		
′ MWI-17R		48227		Surficial - Shallow	Intermediate	Existing		
MWC-20R		48228		Surficial - Shallow	Compliance	Existing		

A zone of discharge is established for the Plant A and Plant B wastewater treatment pond areas, more specifically described as 3. follows:



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The zone of discharge for Plant A wastewater treatment pond areas shall be 1,000 feet in the direction of groundwater flow and 500 feet in other directions.

The zone of discharge for Plant B wastewater treatment pond areas and the percolation pond shall be the shoreline in the direction of groundwater flow as monitored by a compliance well and 500 feet in other directions or the facilities property boundary whichever is less as monitored by a compliance well.

[62-520.200(27), 62-520.461, and 62-520.465]

4. The wells included in the ground water monitoring plan shall be sampled for the parameters, and at the frequencies listed below:

Parameters (units)	Monitoring Requirements				
	Compliance Well Limits ¹	Frequency	Sample Type		
2,4-Dinitrotoluene, (µg/l)	** Report	Quarterly	Grab		
2,6-Dinitrotoluene, (μg/l)	** Report	* Quarterly	Grab		
Nitrate - Nitrite, (mg/l as N)	10.0 mg/l	Quarterly	Grab		
Organic Nitrogen, (mg/l as N)	Report	Quarterly	Grab		
pH (standard units)	Report	Quarterly	Field		
Sodium (mg/l)	160.0	Quarterly	Grab		
Specific conductance (µmhos/cm)	Report	Quarterly	Field		
Temperature (degrees C)	Report	Quarterly	Field		
Total Ammonia, (mg/l as N)	Report	Quarterly	Grab		
Total Dissolved Solids (TDS)(mg/l)	Report	Quarterly	Grab		
Total Kjeldahl Nitrogen, TKN, (mg/l as N)	Report	Quarterly	Grab		
Total Nitrogen, (mg/l as N)	Report	Quarterly	Grab		
Total Organic Carbon, (mg/l)	Report	Quarterly	Grab		
Total Phosphorus, (mg/l'as P)	Report **	Quarterly	Grab		
Turbidity (NTUs)	Report	Quarterly	Field		
VOC, (µg/l)	Report any detected	Quarterly	Grab		
Trichloroethene, (µg/l)	3 μg/l	Quarterly	Grab		
1,2-Dichloroethane, (µg/l)	3 μg/l	Quarterly	Grab		
cis-1,2-Dichloroethene, (μg/l)	70 μg/l	Quarterly	Grab		
Water level (MSE)	Report	Quarterly	In-situ (see III.5.)		

¹ Compliance with Part III.4. and IV.1. of this permit is not required for the Plant Area B wells during the active term of the Division of Waste Management Consent Order OGC File No. 94-1833 (or any subsequent revisions to or revised versions of the Consent Order) for compliance wells or the zone of discharge subject to the requirements of Consent Order No. 94-1833.

- ** Division of Waste Management Consent Order OGC File No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (µg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. This permit does not alter substantive or procedural requirements of that Consent Order.
- 5. Water levels shall be recorded prior to evacuating the well for sample collection. Measurements, referenced to mean sea level, shall include the top of the well casing, depth to ground water, and the calculated ground water elevation at a precision of plus or minus 0.01 feet.
- 6. Ground water monitoring wells shall be evacuated or purged prior to sampling to obtain a representative sample. All sampling procedures shall be in accordance with the DEP standard operating procedures for the collection of ground water samples.

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- 7. Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions.
- 8. If a monitoring well becomes damaged or cannot be sampled for some reason, the permittee shall notify the Department with a written report within seven days detailing the circumstances and remedial measures taken or proposed. Replacement of monitoring wells shall be approved in advance by the Department.
- 9. Ground water monitoring test results shall be submitted on attached form Groundwater Monitoring Report Part D and shall be submitted in conjunction with the DMR in accordance with condition I. E.2.

IV. Other Land Application Requirements

- 1. The permittee's discharge to ground water shall not cause a violation of water quality standards for Class G-II ground waters at the boundary of the zone of discharge in accordance with rules 62-520.400 and 62-520.420, 62-520.520(1), F.A.C.. This facility has "existing installation" status and is exempt from compliance with secondary drinking water standards.
- 2. The permittee's discharge to ground water shall not cause a violation of the minimum criteria for ground water specified in rule 62-520.400, F.A.C., within the zone of discharge.

V. Operation and Maintenance Requirements

A. Operation of Treatment and Disposal Facilities

- 1. The permittee shall ensure that the operation of this facility is as described in the application and supporting documents.
- 2. The operation of the pollution control facilities described in this permit shall be under the full time supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control.
- 3. The permittee shall notify the Department in writing within seven days after there is a discharge via outfall D-001 on account of 25 year, 24 hours storm events or equivalent chronic rainfall events that exceed the capacity of the land application system. Such notices shall include rainfall measurement data and provide calculations to demonstrate that the discharge was due to the rainfall event and estimate the expected duration of the surface water discharge. Thereafter, the permittee shall update the Department at least once every two weeks concerning the status of the discharge and any revised estimations of its duration.

B. Record keeping Requirements

The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:

- 1. Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
- 2. Copies of all reports, other than those required in items 1. and 6. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;
- 3. Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
- 4. A copy of the current permit;
- 5. A copy of any required record drawings;
- 6. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date on the logs or schedule.

VI. Schedules

1. The permittee shall achieve compliance with the other conditions of this permit as follows:

Operational level attained

Issuance Date of permit

2. No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

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Taminco Inc. Pace Plant Page 13 PERMIT NUMBER:

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VII. Other Specific Conditions

A. Specific Conditions Applicable to All Permits

- Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Northwest District Office, are made a part hereof.
- 2. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
- 3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
- 4. The permittee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater or sludge. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.

B. Specific Conditions Related to Best Management Practices

1. BMP Plan:

For purposes of this part, the terms "pollutant" or "pollutants" refer to any substance listed as toxic under Section 307(a)(1) of the Clean Water Act (the "Act"), oil, as defined in Section 311(a)(1) of the Act, and any substance listed as hazardous under Section 311 of the Act. The permittee shall develop and implement a Best-Management Practices (BMP) plan which prevents, or minimizes, the potential for the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations; and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. Implementation:

Not applicable.

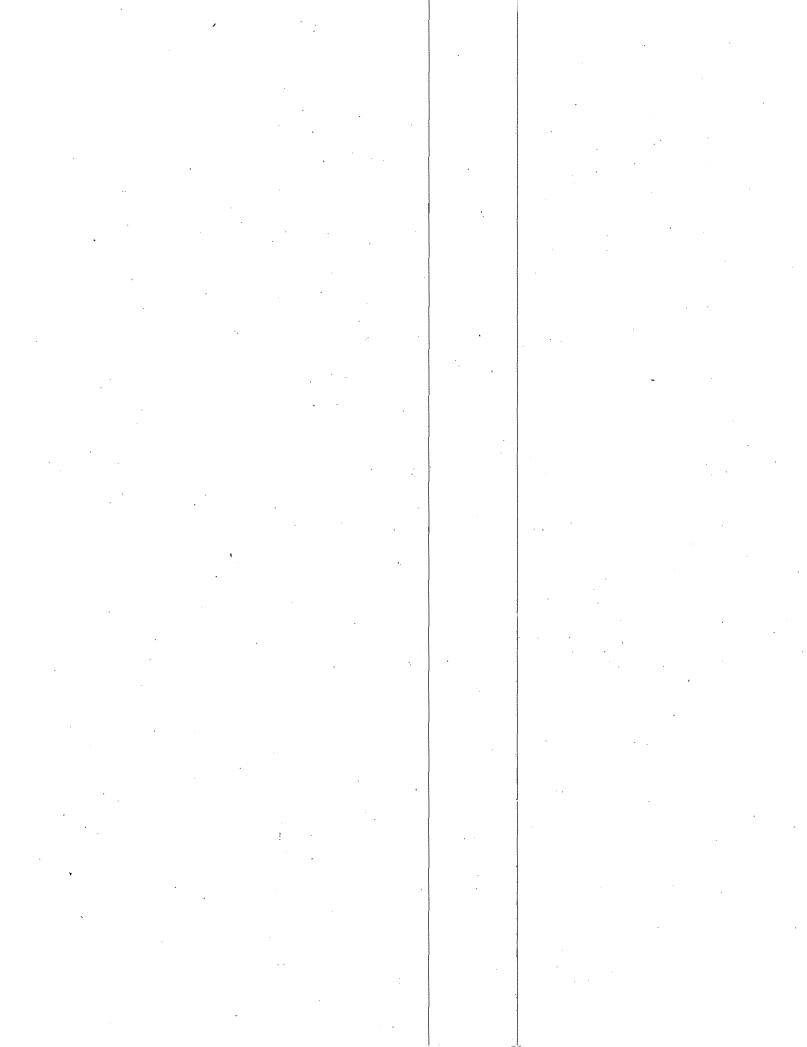
3. General Requirements:

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps.
- b. Establish specific objectives for the control of pollutants.
- (1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural conditions (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.
- c. Establish specific best management practices to meet the objectives identified under paragraph b of this subsection, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented.
- d. Be reviewed by plant engineering staff and plant manager.

4. Documentation:

The permittee shall maintain the BMP plan at the facility and shall make the plan available to the Department upon request.



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5. BMP Plan Modification:

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

6. Modification for Ineffectiveness:

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of significant amounts of pollutants to surface waters and the specific objectives and requirements under paragraphs b. and c. of item 3, the permit shall be subject to modification pursuant to rule 62-620.325, F.A.C., to incorporate revised BMP requirements.

C. Duty to Reapply

The permittee shall apply for renewal of this permit at least 180 days before the expiration date of the permit using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. The existing permit shall not expire until the Department has taken final action on the application renewal in accordance with the provisions of 62-620.335(3) and (4), F.A.C.

D. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

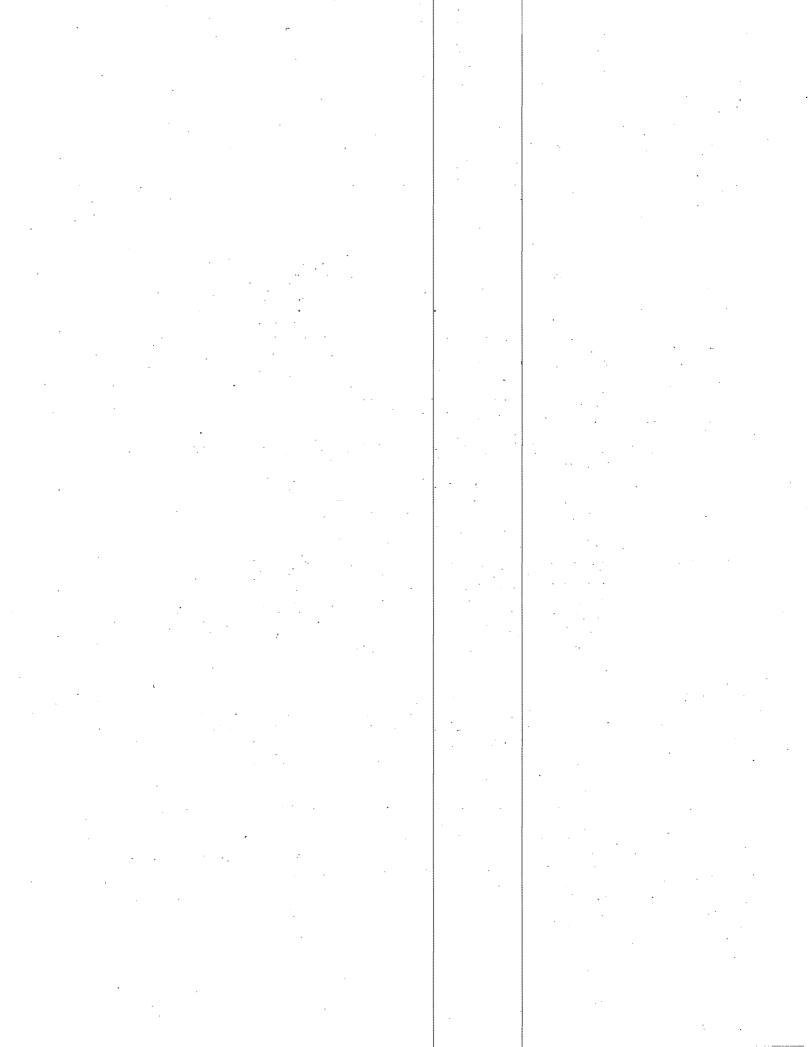
- 1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile, five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol, and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

E. Reopener Clause

- 1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345, F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- 2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.
- 3. The Department may finalize a Total Maximum Daily Load (TMDL) during the life of the permit. Once a TMDL has been established and adopted by rule, the Department may revise this permit to incorporate the final findings of the TMDL.



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VIII. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1)]

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2)]
- 3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3)]
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4)]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62:620.610(5)]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
- 7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
- 8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
- 9. The permittee by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules. [62-620.610(9)]

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PERMITTEE: Taminco Inc.

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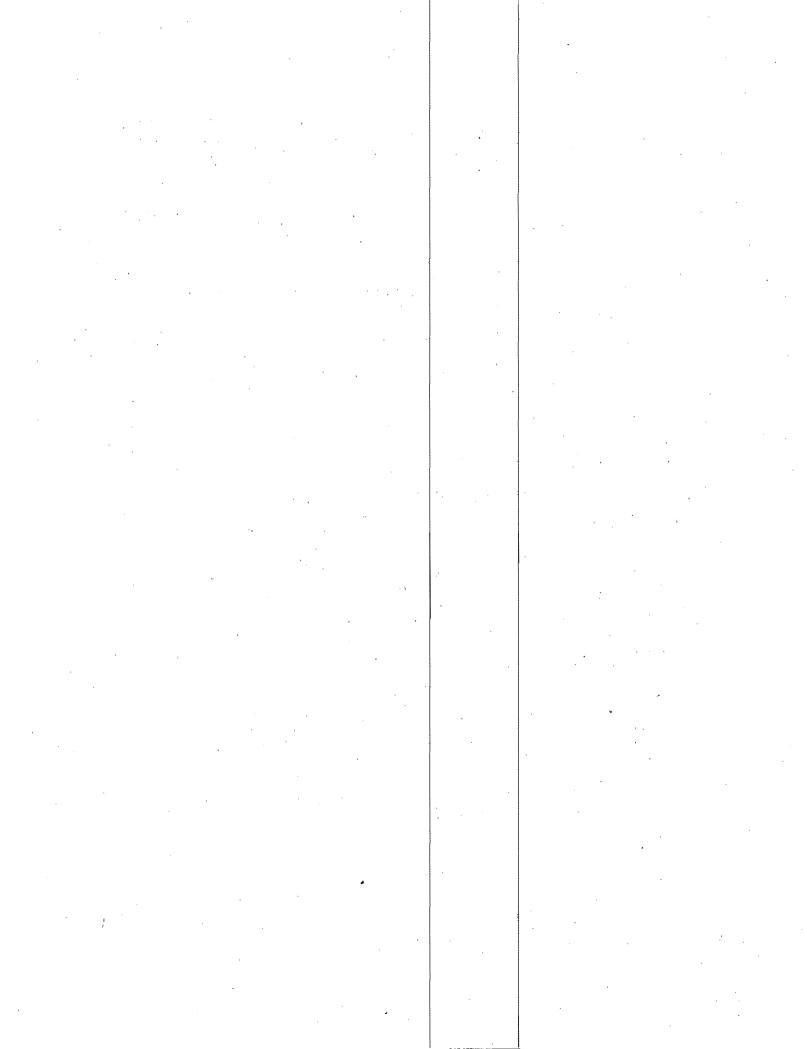
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- 10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department [62-620.610(11)]
- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12)]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department [62-620.610(14)]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
- 16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16)]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance.

[62-620.610(17)]

- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.



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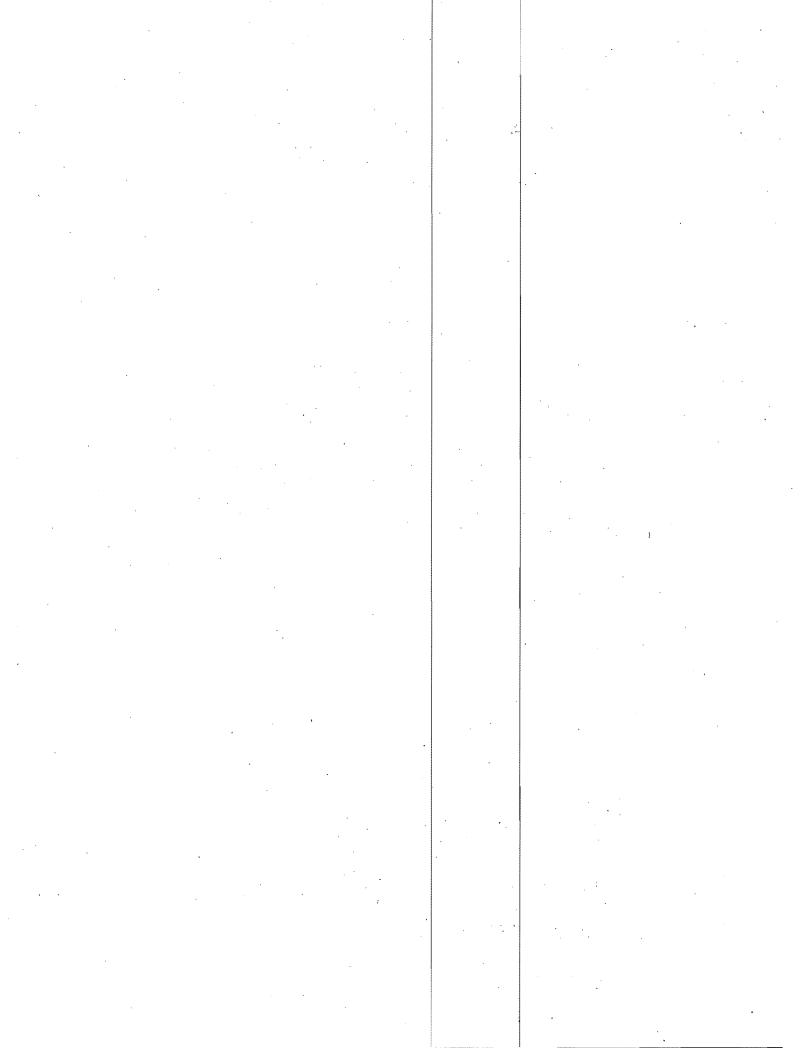
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- b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
- d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
- e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
- f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
- 20. The permittee shall report to the Department's Northwest District any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water of the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph
 (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the
 environment will be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL
 FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the
 permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following
 information to the State Warning Point:
 - (a) Name; address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (i) Other persons or agencies contacted.



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(2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Northwest District within 24 hours from the time the permittee becomes aware of the circumstances.

If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Northwest District shall waive the written report.

[62-620.610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions VIII. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition VIII.20 of this permit. [62-620.610(21)]

22. Bypass Provisions.

- "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.
- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage, and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Permit Condition VIII 22. c. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition VIII. 20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition VIII. 22. b.(1) through (3) of this permit.
- A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition VIII. 22. b. through d. of this permit. [62-620.610(22)]

23. Upset Provisions.

- "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
 - (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
 - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Permit Condition VIII.5, of this permit; and
 - (4) The permittee complied with any remedial measures required under Permit Condition VIII. 5. of this permit.

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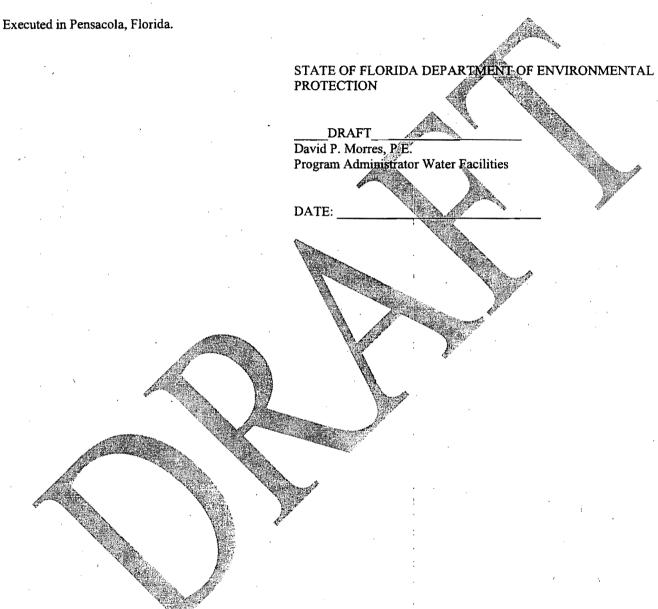
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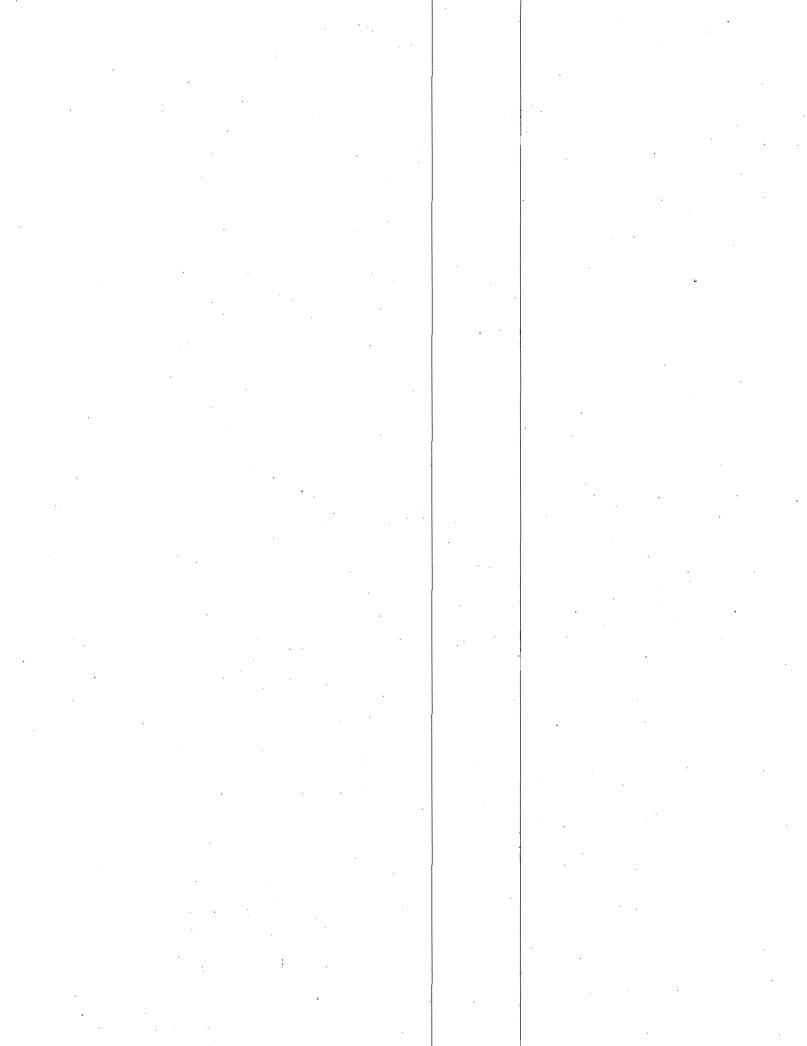
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c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.

Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review. [62-620.610(23)]





FACT SHEET FOR

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION INDUSTRIAL WASTEWATER FACILITY PERMIT

Permit Number: FL0002313

File Number: FL0002313-010-IW1S

WBID 548A – Upper Escambia Bay

Application Date: October 28, 2011

Permit Writer: W. Armstrong, P.E.

1. SYNOPSIS OF APPLICATION

a. Name of Applicant

Robert Dwane Brumfield – Site Manager Taminco Inc. 7450 Windsor Drive, Suite 411 Allentown, PA 18195

Plant Address:

Taminco Inc., Pace Plant 4575 Highway 90 East Pace, FL Santa Rosa County

b. Type of Facility - Chemical Manufacturing Complex

SIC code:

2869 Industrial Organic Chemicals

The Pace Plant of Taminco Inc. (Taminco) is a chemical manufacturing complex. Individual production facilities are clustered in two areas designated as "A" and "B". Plants located in Area A include two methylamines plants, two higher amines plants and a dimethyllaurylamine/ dimethyl myristylamine plant. Area B includes a liquid hydrogen terminal, an injection well and a groundwater remediation facility that are owned and operated by Air Products. Area B also includes the wastewater treatment system for the Taminco plant. The land is owned by Air Products and Taminco is licensed to operate the wastewater treatment system.

c. Facility Capacity

Discharge to Surface Water (SW)	0.00 MGD
Component to Perc Ponds	1.23 MGD
Non-process Flow	1.01 MGD
Process Flow	0.22 MGD
Proposed Design Capacity	1.23 MGD
Existing Design Capacity:	1.23 MGD

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d. Description of Facilities

The existing system is a wastewater treatment system for the industrial wastewaters generated by the Pace Plant of TAMINCO. Individual production facilities operated by TAMINCO include two plants for the production of methylamines, two plants for the production of higher amines, a dimethyl Laurylamine/Dimethyl Myristylamine production area, and a utilities area containing water treatment and boilers. TAMINCO also operates the cogeneration facility owned by Gulf Power Co. Air Products and Chemicals continues to operate the liquid hydrogen terminal and the groundwater remediation project in Area B. The liquid hydrogen terminal will have a de minimis discharge into the treatment system.

Wastewater treatment includes neutralization of the wastewater, equalization, anaerobic treatment, aerobic treatment and final percolation in the site Rapid Infiltration Basins (RIBs). Facility modifications, completed by the former owner, APCI, reduced the effluent impact on Escambia Bay of nutrients and oxygen depleting substances by eliminating effluent discharge to Escambia Bay except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events. APCI constructed three (3) additional Rapid Infiltration Basins (RIBs) that substantially increased the disposal capacity of the land application system. APCI, also, shut down the methanol, ammonia, nitric acid and ammonium nitrate plants. The individual plants shutting down resulted in a reduction of process wastewater flow from 0.41 MGD to 0.22 MGD. The total design capacity remains at 1.23 MGD MADF with 1.23 MGD MADF discharging to the percolation pond system and an estimated 0.00 MGD MADF discharging to Escambia Bay. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

e. Applicant's Effluent Disposal Location(s)

Surface Water Discharge: Receiving waters:

Outfall D001: Escambia Bay, Class III marine waters, Lat 30° 34' 05" N, Long 87° 09' 05" W

Land Application:

Receiving waters

Outfall G001: 7 percolation ponds totaling 848,600 ft² Surficial sand and gravel aquifer

f. Description of Effluent Discharges (as reported by applicant): Outfall Serial Number D001:

Pollutants present in significant quantities or which are subject to effluent limitations are as follows:

Parameters	Reported Data					
	Daily Maximum	Maximum 30 day average	Long Term Average			
Flow, MGD	2.94	·	0.07			
CBOD ₅ , mg/l / lbs/day	17.73 / 444.1	11.8 / 294.0	11.8 / 294.0			
COD, mg/l / lbs/day						
TOC, mg/l / lbs/day	,					
TSS, mg/l / lbs/day	12 / 300.6	12 / 250.5	8.0 / 250.5			
pH, (SU)	min 6.7 / max 6.9	min 6.7 / max 6.9				
Ammonia, as N, mg/l / LBS/day	12.64 / 315.6	12.64 / 173.4	6.92/ 173.4			
Nitrate, mg/l / lbs/day	16.92 / 423.84	8.51 / 213.17	8.51 / 213.17			
Total Nitrogen (as N), mg/l / lbs/day	34.22 / 857.2	34,22 / 466.2	18.61 / 466.2			
Total Phosphorus (as P), mg/l / lbs/day	2.60 / 65.1	2.60 / 51.9	2.07 / 51.9			
Total Copper, mg/l / lbs/day	0.00048 / 0.0120	0.00048 / 0.0101	0.00041 / 0.0101			
Total Chromium, mg/l / lbs/day	0.071 / 0.1779		·			
Total Nickel	0.0022 / 0.0551					
Total Silver	ND					
Total Zinc, mg/l / lbs/day	0.0038 / 0.0952					
Total Cyanide	ND.					
GS/MS Fraction- VOC	ND					
GS/MS Fraction- Acid	ND					
GS/MS Fraction- BNA	ND:					
GS/MS Fraction- Pesticides	ND ·					

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2. PROPOSED EFFLUENT WATER LIMITATIONS

The Discharge from Outfall D-001 shall be limited and monitored by the Applicant as specified below:

a. The Distings from Salidin 2 out shall be familied and monitored by				are rippireum	as specified selet	<u> </u>
Parameters	Effluent Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Other	Frequency	Sample Type	Sample Location
Flow (MGD)	Report	Report	na	Continuous	Recorder	EFF-1
pH (SU)	na ·	na	6.5 to 8.5	Daily	Grab	EFF-1
Total Ammonia (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrate (MG/L as N)	Repòrt	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrogen, Total (MG/L)	Report	Report		1/week	Grab	EFF-1
Total Phosphorus (MG/L as P)	Report	Report	Report (lbs/day as P)	1/week	Grab	EFF-1
Total Suspended Solids (MG/L)	30	60	Report (lbs/day)	1/week	Grab	EFF-1
CBOD ₅ , (MG/L)	30	60	Report (lbs/day)	1/week	Grab	EFF-1
Total Recoverable Copper (UG/L)	na ·	na	Max 3.7 ug/l wqs	1/week	Grab	EFF-1
Rainfall (inches)	na	na	Report	Daily	24 Hour Total	
Whole Effluent Toxicity	See below					
OCPSF 40CFR414 Parameters			See belo	w		

b. OCPSF 40CFR414 Parameters - If there is a discharge the permittee shall initiate the series of tests described below to evaluate the compliance with effluent limitations of 40CFR414 (OCPSF) for the discharge of toxic pollutants from Outfall D001. These tests are required one time per calendar year for all discharge events.

The discharge must not exceed the concentration of the toxic pollutants listed below:

Outfall D001 40CFR414 (OCPSF) Limits	Discharge Limitations			Monitoring Requirements		
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
1,1,1-Trichloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
1,1,2-Trichloroethane	0.0038	0.0097	na	1/уеаг	Grab	EFF-1
1,1-Dichloroethane	0.0039	0.0106	na	1/уеаг	Grab`	EFF-1
1,1-Dichloroethylene	0.0029	0.0045	na	1/year	Grab	EFF-1
1,2,4-Trichlorobenzene	0.0122	0.0250	na	1/year	Grab	EFF-1
1,2-Dichlorobenzene	0.0138	0.0292	na	1/уеаг	Grab	EFF-1
1,2-Dichloroethane	0.0122	0.0377	na	1/year	Grab	EFF-1
1,2-Dichloropropane	0.0274	0.0411	na	1/year	Grab	EFF-1
1,2-trans-Dichloroethylene	0.0038	0.0097	na	1/year	Grab	EFF-1
1,3-Dichlorobenzene	0.0055	0.0079	na	1/year	Grab	EFF-1
1,3-Dichloropropylene [1,3-Dichloropropene]	0.0052	0.0079	na	l/year	Grab	EFF-1
1,4-Dichlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
2,4-Dichlorophenol	0.0070	0.0200	na	l/year	Grab	EFF-1
2,4-Dimethylphenol	0.0032	0.0064	ná	l/year	Grab	EFF-1
2,4-Dinitrophenol	0.0127	0.0220	na	l/year	Grab	EFF-1
2,4-Dinitrotoluene	0.0202	0.0510	na	1/year	Grab	EFF-1
2,6-Dinitrotoluene	0.0456	0.1147	na	1/year	Grab	EFF-1
2-Chlorophenol	0.0055	0.0175	na	1/year	Grab	EFF-1
2-Nitrophenol	0.0073	0.0123	na	1/year	Grab	EFF-1
3,4-Benzofluoranthene [benzo(b)fluoranthene]	0.0041	0.0109	na	1/year	Grab	EFF-1
4,6-Dinitro-o-Cresol	0.0140	0.0495	na	l/year	Grab	EFF-1
4-Nitrophenol	0.0129	0.0222	na	1/year	Grab	EFF-1
Acenaphthene	0.0039	0.0106	na	l/year	Grab	EFF-1

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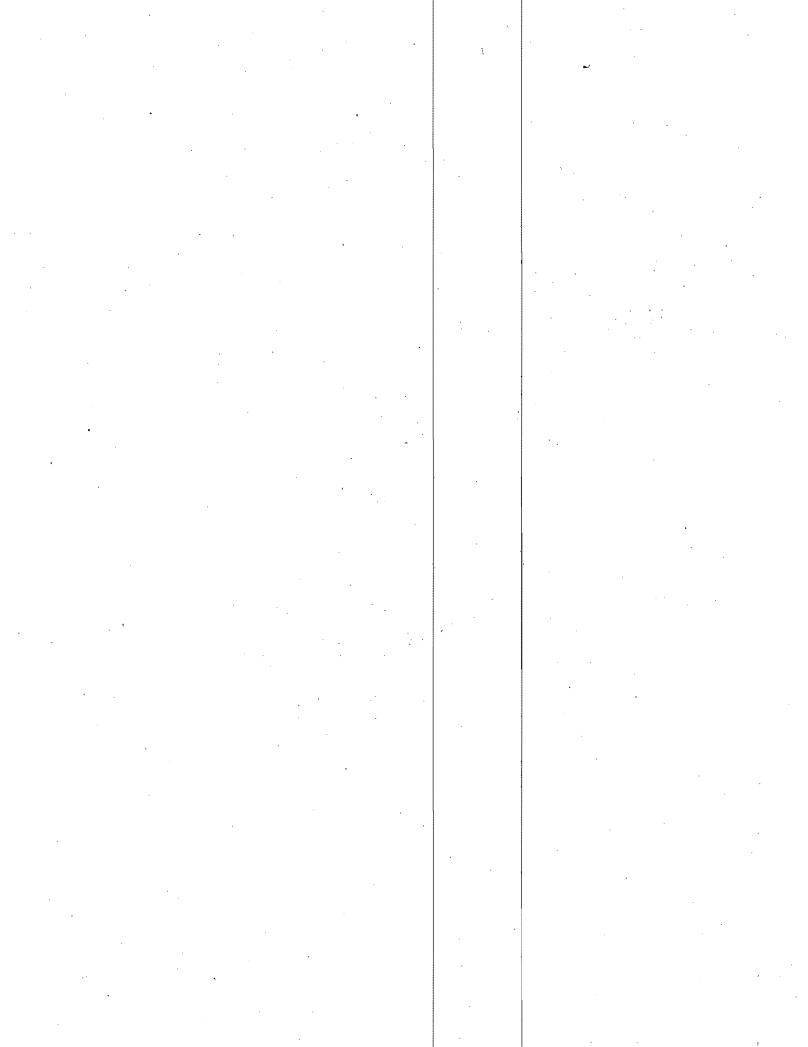
2. b. continued: Outfall D001

40CFR414 (OCPSF) Limits	Disc	harge Limitation	ons	Monitoring Requirements		
Parameter (mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
Acenaphthylene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Acrylonitrile	0.0172	0.0433	na	l/year	Grab	EFF-1
Anthracene	0.0039	0.0106	na	1/year	Grab	EFF-1
Benzene	0.0066	0.0243	na	l/year	Grab	EFF-1
Benzo(a) Anthracene	wqs	wqs	*0.031 µg/l#	1/year	Grab	EFF-1
Benzo(a) Pyrene	wqs	wqs	*0.031 μg/l*	1/year	Grab	EFF-1
Benzo(k) Fluoranthene	wqs	wqs	*0.031 µg/l*	l/year	Grab	EFF-1
bis(2-Ethylhexyl)Phthalate	0.0184	0.0499	. na	l/year	Grab	EFF-1
Carbon Tetrachloride	0.0032	0.0068	na .	1/year	Grab	EFF-1
Chlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Chloroethane	0.0186	0.0479	na	1/year	Grab	EFF-1
Chloroform	0.0038	0.0082	na	l/year	Grab	EFF-1
Chrysene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Di-n-Butyl Phthalate	0.0048	0.0102	na	1/year	Grab	EFF-1
Diethyl Phthalate	0.0145	0.0363	na	1/year	Grab	EFF-1
Dimethyl Phthalate	0.0034	0.0084	na	1/year	Grab	EFF-1
Ethylbenzene	0.0057	0.0193	na.	l/year	Grab	EFF-1
Fluoranthene	0.0045	0.0122	na	l/year	Grab	EFF-1
Fluorene	0.0039	0.0106	na	l/year	Grab	EFF-1
Hexachlorobenzene	0.0027	0.0050	na	l/year	Grab	EFF-1
Hexachlorobutadiene	0.0036	0.0088	na	1/year	Grab	EFF-1
Hexachloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
Methyl Chloride	0.0154	0.0340	na	l/year	Grab	EFF-1
Methylene Chloride	0.0072	0.0159	na	l/year	Grab	EFF-1
Naphthalene	0.0039	0.0106	· na	l/year	Gráb	EFF-1
Nitrobenzene	0.0048	0.0122	na	l/year	. Grab	EFF-1
Phenanthrene	wqs	wqs	*0.031 μg/l#	l/year	Grab	EFF-1
Phenol	0.0027	0.0047	na	l/year	Grab	EFF-1
Pyrene	0.0045	0.0120	na	l/year	Grab	EFF-1
Tetrachloroethylene	wqs	wqs	Mx 8.85 μg/l#	l/year	Grab	EFF-1
Toluene	0.0047	0.0143	na	l/year ·	Grab	EFF-1
Total Recoverable Cyanide	wqs	wqs	Max 1.0 μg/l	l/year	Grab	EFF-1
Total Recoverable Chromium	wqs	wqs	Max 50 μg/l	1/year	Grab	EFF-1
Tot Rec Copper (UG/L)	wqs	wqs	Max 3.7 ug/l	1/week	Grab	EFF-1
Total Recoverable Lead	wqs	wqs	Max 8.5 μg/l	1/year	Grab	EFF-1
Total Recoverable Nickel	wqs	wqs	Max 8.3 μg/l	l/year	Grab	EFF-I
Total Recoverable Zinc	wqs	wqs	Max 86.0 μg/l	1/year	Grab	EFF-1
Trichloroethylene [ethene]	/ 0.0038	0.0097	na	l/year	Grab	EFF-1
Vinyl Chloride	0.0186	0.0479	na	1/year	· Grab	EFF-1

Notes: wqs - Those parameters with the maximum concentrations marked as "wqs" are limited by the more stringent water quality standard as indicated in the "Other" column. [62-302.530(28),(30),(57),(9),(17),(37),(64),(69), FAC]

^{# -} Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12-month rolling annual average basis. [62-302.530 Note (1), FAC]

^{* -} The limit for those parameters with the max concentrations marked with a "*" symbol is the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs) and is limited to < 0.031 µg/l on an annual average basis: Acenaphthylene, Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi)perylene, Benzo(k) Fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3cd)pyrene, and Phenanthrene. [62-302.530 F.A.C.]



Whole Effluent Toxicity Testing Requirements - If there is a discharge, the permittee shall initiate a series of tests to evaluate whole effluent toxicity of the discharge from Outfall D001 in accordance with Condition I.F. of Industrial Wastewater Permit #FL0002313. While discharging from Outfall D-001 the whole effluent toxicity tests shall be performed for each occurrence of a discharge but not more than one time per calendar year.

c. The Discharge from Land Application System <u>G-001</u> shall be limited and monitored by the Applicant as specified below at EFF-3 or EFF-4, whichever is in use at the time of sampling:

G-001 (WAFR 37240)		Discharge Limitations			nitoring Requiremen	ıts
Parameters (units)	Mo Avg.	Daily Max.	Other -specify	Frequency	Sample Type	Sam Pnt
2,4-Dinitrotoluene, (µg/l)	na	** Report	na	1/month	24 hour composite	EFF-3, 4
2,6-Dinitrotoluene, (µg/l)	na	** Report	na	1/month	24 hour composite	EFF-3, 4
CBOD ₅ , (mg/l)	na .	Report	na	l/month	24 hour composite	EFF-3, 4
Chemical Oxygen Dem, COD, (mg/l)	na.	Report	na	1/month	24 hour composite	EFF-3, 4
Flow, (MGD)	Report	Report	na	Continuous	Recorder	EFF-3, 4
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Organic Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4
pH, (standard units)	na	na	Report min & max	5/week	Grab	EFF-3, 4
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Dissolved Solids TDS, mg/l	Report	Report	na .	weekly	24 hour composite	EFF-3, 4
Tot. Kjeldahl Nitr. TKN, (mg/l as N)	Report	Report	na	weekly	.24 hour composite	EFF-3, 4
Total Nitrogen, (mg/l as N)	Report	Report	па	weekly	Calculated	EFF-3, 4
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	24 hour composite	EFF-3, 4

3. BASIS FOR EFFLUENT LIMITS AND MONITORING REQUIREMENTS

Taminco has attained a "zero-discharge" level with a provision for discharges on an "emergency only" basis and the plant now operates without a discharge to surface waters with the exception of significant rain events. In view of the 100% reduction of surface water discharge, the capacity of their percolation pond system and a reduction in process wastewater generation during the last two permit terms, a WQBEL Study was not undertaken. The proposed effluent limits are based on the most stringent of current State water standards and BPCT/TBE Limits. Previous permitted effluent limits were taken into consideration whenever appropriate. The final BPT and BAT limits are applied as concentrations as opposed to mass limits since the facility will be permitted to discharge on an "emergency only" basis,

The following table provides the basis for Part I. A. provisions.

Outfall D-001:

Parameter	Units	Limit	Basis	Rationale
Flow	MGD	Report Report	Monthly Average Daily Maximum	BPJ
pH (SU)	SU	8.5 6.5	Daily Maximum Daily Minimum	EGL is not as stringent as WQC 62-302.530(52)(c) FAC
Total Ammonia, (as N)	MG/L	Report	Monthly Average Daily Maximum	BPJ; Ammonia plant shut down, Reporting required because total ammonia is required for the determination of unionized ammonia
Nitrate (as N)	MG/L	Report	Monthly Average Daily Maximum	BPJ; ammonium nitrate plant shut down, required for the determination of total nitrogen
Total Nitrogen	MG/L	Report	Monthly Average Daily Maximum	No EGL Limit, BPJ, Emergency discharge only
Total Phosphorus (as P)	MG/L	Report	Monthly Average Daily Maximum	No EGL Limit, BPJ, Emergency discharge only
Total Suspended Solids	MG/L	30 60	Monthly Average Daily Maximum	40CFR414; 62-660.400; 62-600.420; treatment based limits more restrictive than 40CFR414 limits; see discussion below
CBOD ₅	MG/L	30	Monthly Average	40CFR414; 62-660.400; 62-600.420; adjusted as

* .

Parameter	Units	Limit	Basis	Rationale	
		60	Daily Maximum	discussed below; BPJ	
Total Recoverable Copper	MG/L	Max 0.0037	Monthly Average Daily Maximum	40CFR414; BPJ limits based on concentration only due to intermittent/ emergency discharge.	
Rainfall	Inches	Report		BPJ	
Whole Effluent Toxicity		See Below			
OCPSF 40CFR414	UG/L		Monthly Average Daily Maximum	40CFR414; BPJ limits based on concentration only due to intermittent/ emergency nature of the discharge. See below	

The following were used as the basis of the permit limitations/conditions:

A. FAC refers to various portions of the Florida Administrative Code.

The effective dates of FAC Rule Chapters cited in the permit and in this document are as follows:

 Chapter
 Effective Date

 62-302
 05-15-02

 62-600
 12-24-96

 62-620
 08-25-03

 62-660
 10-01-98

- B. FS refers to various portions of the Florida Statutes
- C. CFR refers to various portions of the Code of Federal Regulations, Title 40
- D. BPJ refers to Best Professional Judgment

Determination of 40CFR414.91(b) OCPSF TBEL limits:

According to 40 CFR §414, the monthly average and daily maximum lbs/day discharge limitations are determined by multiplying the long-term average process flow, as defined in Federal Register, Volume 58, No. 130, by the concentrations listed in 40 CFR §414.91. The final limits are concentration based due to the unlikely occurrence of a discharge and the unpredictable nature of the discharge. At full production the total LTA flow is 1.23 MGD with process flow being approximately 0.22 MGD; based on these data, the TBEL concentration limits were determined as follows. Since the permittee's process flow mixes with non-process flow prior to discharge, the discharge limitation determined from 40 CFR §414.91 must be adjusted (weighted).

40 CFR § 414.91(b)(2) lists a daily maximum effluent concentration value for Acrylonitrile of 242 μg/l. With a total wastewater flow of 1.23 MGD and a process flow of 0.22 MGD, the daily maximum discharge concentration limitation for Acrylonitrile is calculated as follows:

 $P = EGL \times N/T$ where P is the final effluent limitation for Outfall D001 in mg/l

EGL is the 40 CFR §414.91 effluent guideline limitation in µg/l

N is process wastewater flow (0.22 MGD)

T is the total wastewater flow (1.23 MGD)

 $P = (242 \mu g/l) * (0.22 MGD) / (1.23 MGD)$ resulting in an adjusted daily maximum effluent guideline concentration limit for Acrylonitrile of 43.28 $\mu g/l$.

The adjusted 40CFR414.91 limits were compared with State WQS limits. If the State WQS was more stringent it was used as the effluent limit. See proposed limit table.

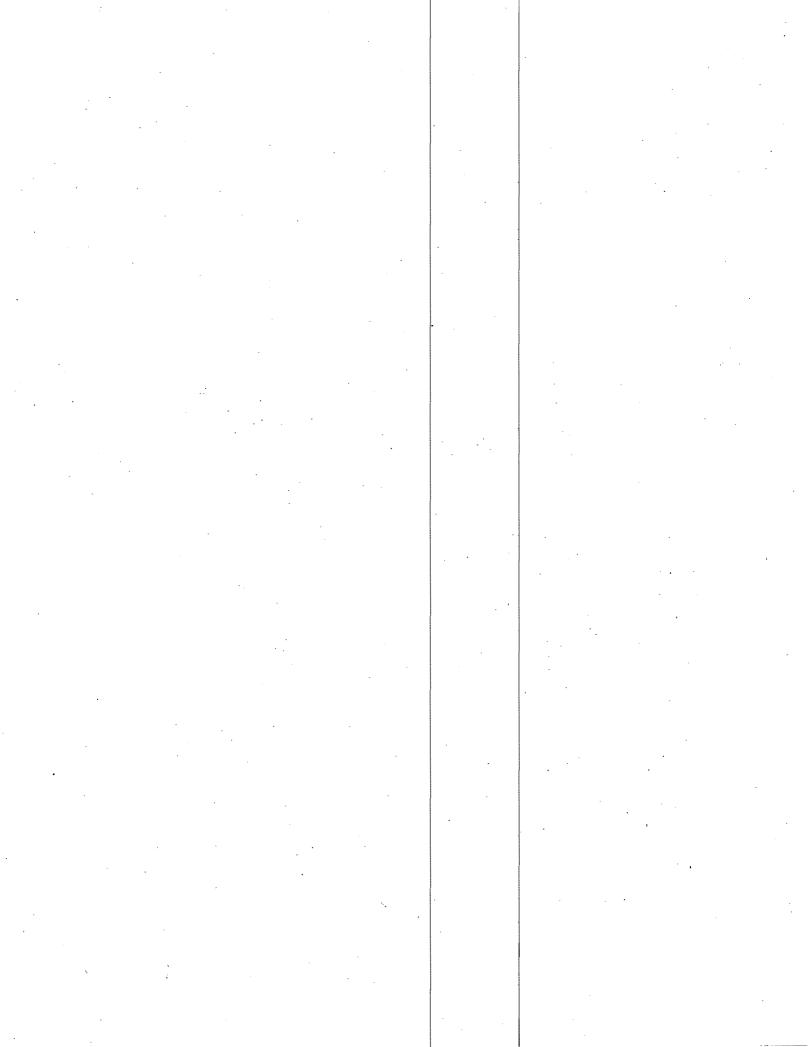
Determination of limits for BOD₅ and TSS based on 40CFR414:

	Parameter	Applicable Guidelines
	Biochemical Oxygen Demand	40 CFR 414: Subpart G: Methylamines Production
ļ	(BOD ₅)	40 CFR 414: Subpart H: Alkyl Amines Production
	Total Suspended Solids	40 CFR 414: Subpart G: Methylamines Production
	(TSS)	40 CFR 414: Subpart H: Alkyl Amines Production

Calculations for Parameters covered under Effluent Limitations Guidelines in 40 CFR

Pertinent Information used in Calculations

40 CFR 414 Subcategory	Proposed LTA Process Flow	Flow Proportion
Subpart G: Methylamines Production	0.15 MGD	0.68
Subpart H: Alkyl Amines Production	0.07 MGD	0.32
<u>Totals</u>	0.22 MGD	1.00 ~



Summary of Subcategory Effluent Limits for BOD₅, TSS and pH for TBEL Limits

Summary of Bubcategory Entitlent Emilies for BOB3, 188 and 511 for 1882 Emilies							
40 CFR 414 Subcategory	BOD ₅ (mg/l)	BOD ₅ (mg/l)	TSS (mg/l)	- TSS (mg/l)	pН		
	(Daily Max.)	(Monthly Avg.)	(Daily Max.)	(Monthly Avg.)			
Subpart G: Methylamines Production	92	34	159	49	6.0-9.0		
Subpart H: Alkyl Amines Production	120	45	183	57	6.0-9.0		

Calculations for BODs and TSS

Limit (mg/l) = Subcategory limit (mg/l) x Flow Proportion

(5	(Sum of weighted Subpart limits equals new, calculated TBEL)					
,	BOD ₅ Daily Maximum	Final				
	Subpart G: Methylamines Production	92 mg/l x 0.68 = 62.56 mg/l				
	CA TANAN IA ' P. I C	100 7 0 20 20 40 7				

Suppart H: Alkyl Amines Production	120 mg/1 x 0.32 = 38.40 mg/1
BOD ₅ Daily Maximum (total)	100.96 mg/l
BOD ₅ Monthly Average	Final
	34 3 0 60 03 10 //

BOD ₅ Daily Average (total)	37.52 mg/l
Subpart H: Alkyl Amines Production	45 mg/l x 0.32 = 14.40 mg/l
Subpart G: Methylamines Production	$34 \text{ mg/l} \times 0.68 = 23.12 \text{ mg/l}$
BOD ₅ Monthly Average	Final

TSS Daily Maximum	Final
Subpart G: Methylamines Production	$159 \text{ mg/l} \times 0.68 = 108.12 \text{ mg/l}$
Subpart H: Alkyl Amines Production	$183 \text{ mg/l} \times 0.32 = 58.56 \text{ mg/l}$
TSS Daily Maximum (total)	166.68 mg/l
TSS Monthly Average	Final
Subpart G: Methylamines Production	49 mg/l x 0.68 = 33.32 mg/l
Subpart H: Alkyl Amines Production	$57 \text{ mg/l} \times 0.32 = 18.24 \text{ mg/l}$
TSS Daily Average (total)	51.56 mg/l

The limits for BOD₅ and TSS based on 40CFR414 are 100.96/37.52 mg/l and 166.68/51.56 mg/l (daily maximum/monthly average). State secondary treatment standards (62-660.400 & 62-600.420 FAC) require an annual average limit of 20 mg/l for TSS and BOD; when adjusted to daily maximum/monthly average the values are 60/30 mg/l. The limitations were based on combined maximum allowable values for process and non-process flows.

BOD Limit Calculations:

40CFR414 limits: (process flow) 37.52 mg/l & 100.96 mg/l @ 0.22 MGD = 68.84 lbs/day & 185.24 lbs/day Secondary Treatment: (non-process) 30 mg/l & 60 mg/l @ 1.01 MGD = 252.70 lbs/day & 505.40 lbs/day Total = 1.23 MGD = 321.54 lbs/day & 690.64 lbs/day

Equivalent BOD₅ concentrations: 321.54 lbs/day @ 1.23 MGD = 31.34 mg/l (more than state standard of 30 mg/l) 690.64 lbs/day @ 1.23 MGD = 67.33 mg/l (more than state standard of 60 mg/l)

<u>TSS</u>: The state treatment based concentration limits for TSS (30/60 mg/l) are more stringent than the 40CFR414 limits and are applied as effluent limits.

The facility has provided reasonable assurance that the discharge will not adversely affect the designated use of receiving water. Available data have been evaluated in accordance with the Department's reasonable assurance procedures to ensure that no limits other than those included in this permit are needed to maintain Florida water quality standards.

The following table provides the basis for Part I. B. provisions.

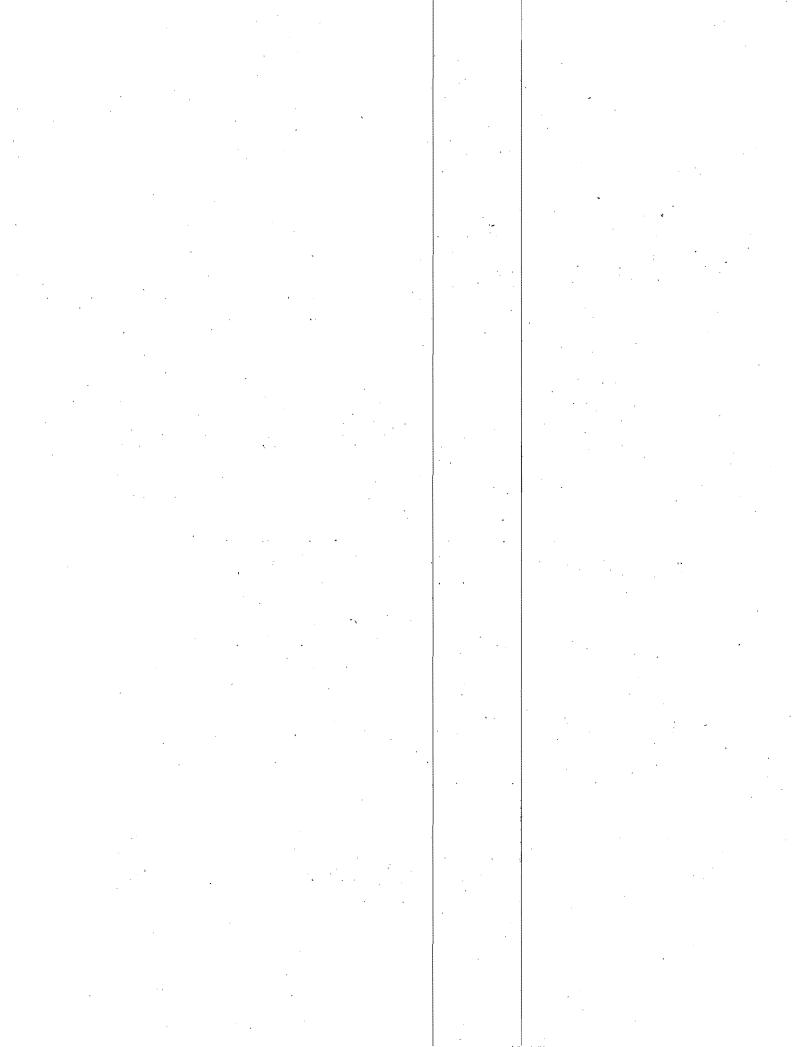
Outfall G-001 - No changes are proposed to the existing limits in the current permit:

G-001	Discharge Limitations		Mont. Reqs.	Basis for Limit/Monitoring Requirement	
Parameters (units)	Mon Avg.	Da. Max.	Other -specify	Frequency	
2,4-Dinitrotoluene, (μg/l) ¹	na	Report	na ·	l/month	BPJ, GW Guidance Concentration, CO# 94-1833
2,6-Dinitrotoluene, (μg/l) ¹	na	Report	na	1/month	BPJ, GW Guidance Concentration, CO# 94-1833
CBOD ₅ , (mg/l)	na	Report	na ·	1/month	BPJ to monitor effluent
Chemical Ox. Demand, COD, (mg/l)	na	Report	па	1/month.	BPJ to monitor effluent
Flow, (MGD)	Report	Report	na	Continuous	BPJ to monitor effluent
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	PDWS, 62-520.420
Organic Nitrogen, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
pH, (standard units)	na	na	Rep.min &max	5/week	Exempt from SDWS 62-520.420
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
Total Dissolved Solids TDS, mg/l	Report	Report	na	weekly	Exempt from SDWS 62-520.420
Total Kjeldahl Nit. TKN, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
Total Nitrogen, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	BPJ to monitor effluent
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	BPJ to monitor effluent

Division of Waste Consent Order OGC No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (μg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. DEP's Ground Water Guidance Concentration Booklet lists 0.2 μg/l for the combined 2,4-Dinitrotoluene and 2,6-Dinitrotoluene mixture. A guidance concentration is not a ground water minimum criteria, 62-520.400, F.A.C. unless authorized by the Secretary.

4. The following monitoring wells are included in the ground water monitoring plan for the wastewater treatment pond areas.

Well Name	Old ID	WAFR No.	Depth	Aquifer	Well Type	New/Existing	
		nitoring Wells	,				
MWB-A1	A-1 1578 90 Surfic			Surficial	Background	Existing	
MWI-A2	A-2	1577	75	Surficial	Intermediate	Existing	
MWC-A3	A-3	1576	64	Surficial	Compliance	Existing	
Plant Area B Mo				onltoring Wells			
MWB-1		46352	100	Surficial - Shallow	Background	Existing	
MWB-PW5	PW-5	46353	265	Surficial - Deep	Background	Existing	
MWI-B1	B-1	1575	100	Surficial - Shallow	Intermediate	Existing	
MWI-B5	B-5	1568	55	Surficial - Shallow	Intermediate	Existing	
MWI-E5	E-5	1570	48	Surficial - Shallow	Intermediate	Existing	
MWI-PW7	PW-7	46354	tbd	Surficial - Deep	Intermediate	Existing	
MWI-E1(S)	E-1(S)	46359	48	Surficial - Shallow	Intermediate	Existing	
MWI-E2(S)	E-2(S)	46360	42	Surficial - Shallow	Intermediate	Existing	
MWI-E6(S)	E-6(S)	46361	37	Surficial - Shallow	Intermediate	Existing	
MWC-B4	B-4	1569	25	Surficial - Shallow	Compliance	Existing	
MWC-E3	E-3	1572	35	Surficial - Shallow	Compliance	Existing	
MWC-2		46358	160	Surficial - Deep	Compliance	Existing	
MWC-303	SW-303	48229	150	Surficial - Deep	Compliance	Existing	
MWI-17R	•	48227		Surficial - Shallow	Intermediate	Existing	
MWC-20R		48228		Surficial - Shallow	Compliance	Existing	



5. The wells included in the ground water monitoring plan shall be sampled for the parameters and frequencies listed below:

Parameters (units)	Monitoring Requirements				
	Frequency	Compliance Limits ²	Basis of Limit / Monitoring Requirement		
2,4-Dinitrotoluene, (μg/l)	Quarterly	Report	BPJ, GW Guidance conc., CO # 94-1833		
2,6-Dinitrotoluene, (µg/l)	Quarterly	Report	BPJ, GW Guidance conc., CO # 94-1833		
Nitrate - Nitrite, (mg/l)	Quarterly	10.0 mg/l	PDWS, 62-520.420		
Organic Nitrogen, (mg/l as N)	Quarterly	Report	BPJ to monitor ground water		
pH, (standard units)	Quarterly	Report	exempt SDWS 62-520.420 (6.5-8.5)		
Sodium (mg/l)	Quarterly	160.0	PDWS, 62-520.420		
Specific Conductance, (µmhos/cm)	Quarterly	Report	BPJ to monitor ground water		
Temperature (degrees C)	Quarterly	Report	BPJ to monitor ground water		
Total Ammonia, (mg/l as N)	Quarterly	Report	BPJ to monitor ground water		
Total Dissolved Solids, (mg/l)	Quarterly	Report	exempt SDWS 62-520.420		
Total Kjeldahl Nitrogen, TKN, (mg/l)	Quarterly	Report	BPJ to monitor ground water		
Total Nitrogen, (mg/l)	Quarterly	Report	BPJ to monitor ground water		
Total Phosphorus, (mg/l as P)	Quarterly	Report	BPJ to monitor ground water		
VOC, (μg/l)	Quarterly	Report any detected	BPJ to monitor ground water		
Trichloroethene, (μg/l)	Quarterly	3 µg/1	PDWS, 62-520.420		
1,2-Dichloroethane, (μg/l)	Quarterly	3 μg/l	PDWS, 62-520.420		
cis-1,2-Dichloroethene, (μg/l)	Quarterly	70 μg/l	PDWS, 62-520.420		
Water Level, (MSL)	Quarterly	Report	BPJ to monitor ground water		

¹ Division of Waste Consent Order OGC No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (μg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. DEP's Ground Water Guidance Concentration Booklet lists 0.2 μg/l for the combined 2,4-Dinitrotoluene and 2,6-Dinitrotoluene mixture. A guidance concentration is not a ground water minimum criteria, 62-520.400, F.A.C. unless authorized by the Secretary.

RESIDUALS MANAGEMENT

The method of disposal for sludge or residuals generated by the treatment of industrial wastewaters by this facility is off site to a Class I landfill in accordance with permit condition II. B.

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

TAMINCO has not requested any relief in this application.

8. COMPLIANCE SCHEDULE AND EFFECTIVE DATE OF FINAL EFFLUENT LIMITATIONS

- a. The permittee continues to achieve compliance with the final wastewater plant surface water discharge effluent limits, Part I.A.1 Permit No. F10002313. The following projects have been implemented:
 - Implementation of the groundwater remediation project in accordance with Consent Order No. 94-1833
 effective on September 19, 1995 to collect, treat, and dispose, by other than surface water discharge, the
 interceptor ditch contaminated groundwater.
 - 2. The permittee achieved compliance with the Industrial Wastewater requirements of Consent Order #94-1833. The work is ongoing for the cleanup and the permittee continues to satisfy the wastewater requirements. Consent Order was transferred to the DEP NWD Waste Cleanup Section on January 29, 2003.

9. TMDL Discussion

Taminco is an "emergency only" discharger via D001 to upper Escambia Bay which is WBID 548A. WBID 548A has a proposed TMDL from 2007 for Total Nitrogen which remains in draft form. If the TMDL is finalized during this permit term, a determination will be made by DEP and EPA whether the permit will need to be reopened to add limits for total nitrogen and/or total phosphorus per the final TMDL for Escambia Bay.

² Compliance with Part III.4, and IV.1., Permit No. FL0002313, is not required for the Plant Area B wells during the active term of Consent Order No. 94-1833 for compliance wells or the zone of discharge subject to the requirements of Division of Waste Consent Order OGC No. 94-1833.

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10. DISCUSSION OF PERMIT EFFLUENT LIMITATIONS

The Permittee has achieved a zero discharge to Escambia Bay with various plant component shutdowns and expansion of the land application system. They are authorized by this permit to discharge to the Bay during extreme rainfall events in excess of the 25 year/24 hour storm. Effluent limits were calculated using concentration limits instead of mass limits as discharge to the Bay is on an "Emergency Only" basis.

In this permit the point of compliance for the surface water discharge is the Alpha Pond discharge. This permit is also monitoring the effluent discharge to the land application, percolation pond system, directly.

11. EFFECTS OF SURFACE WATER DISCHARGE ON THREATENED OR ENDANGERED SPECIES

The Department does not anticipate adverse impacts on any threatened or endangered species as a result of permit renewal.

12. DEP CONTACT

Additional information concerning the permit may be obtained during normal business hours from:

W. Armstrong, P.E., Industrial Wastewater Section Supervisor Florida Department of Environmental Protection Northwest District Office 160 W. Government St., Suite 308 Pensacola, FL 32502-5740 Telephone No.: (850) 595-8300

13. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact sheet, public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in item 12.

14. PROPOSED SCHEDULE FOR PERMIT ISSUANCE

Proposed Public Comment Period Beginning: February 22, 2012
For Draft Permit Ending: March 23, 2012
Public Notice of Intent To Issue Permit March 26, 2012
Completion of Public Comment Period April 9, 2012
Final Department Action April 10, 2012

15. PROCEDURES FOR THE FORMULATION OF FINAL DECISION ON PERMIT ISSUANCE

a. Public Comment Period

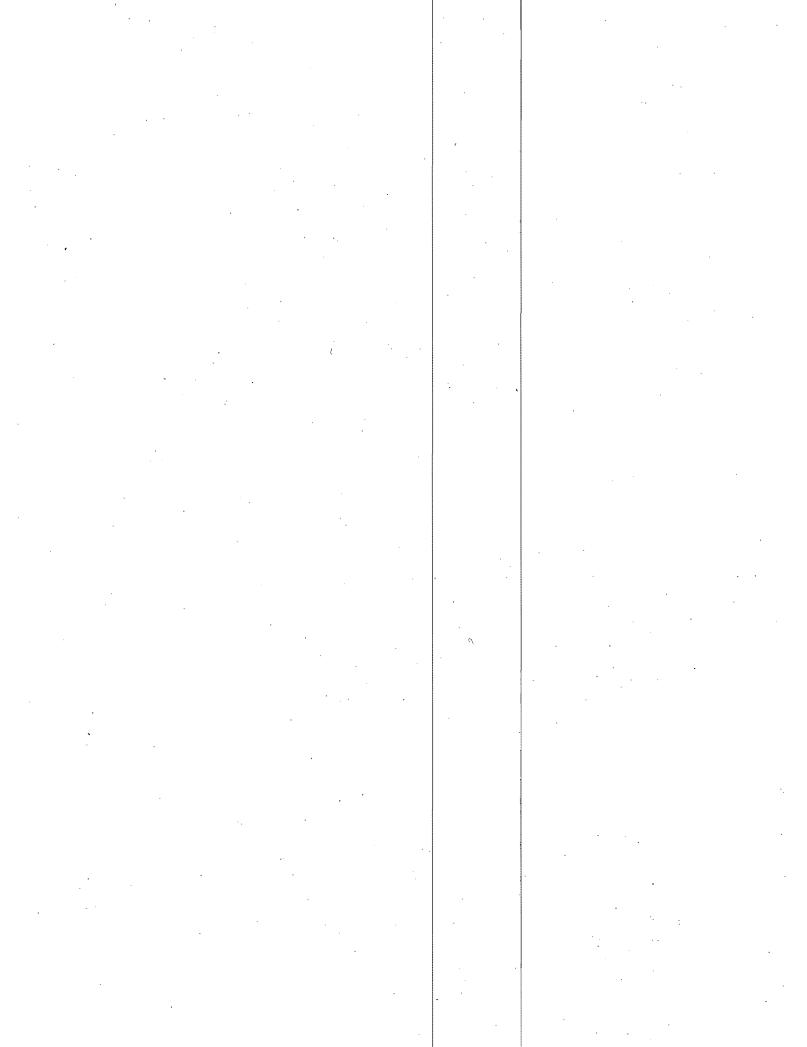
The Department of Environmental Protection proposes to issue a wastewater facility permit to this applicant subject to the aforementioned reclaimed water or effluent limitations and conditions. This decision is tentative and open to comment from the public.

Interested persons are invited to submit written comments regarding permit issuance on the draft permit limitations and conditions to the following address:

W. Armstrong, P.E., Industrial Wastewater Section Supervisor Florida Department of Environmental Protection Northwest District Office 160 W. Government St., Suite 308 Pensacola, FL 32502-5740

All comments received within 30 days following the date of public notice, pursuant to Rule 62-620.550, F.A.C., will be considered in the formulation of the final decision with regard to permit issuance. Any interested person may submit written comments on the Department's proposed permitting decision or may submit a written request for a public meeting to the address specified above, in accordance with Rule 62-620.555, F.A.C. The comments or request for a public meeting must contain the information set forth below and must be received in the above named District office of the Department within 30 days of receipt or publication of the public notice. Failure to submit comments or request a public meeting within this time period will constitute a waiver of any right such person may have to submit comments or request a public meeting under Rule 62-620.555, F.A.C.

The comments shall contain the following information:



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- The commenter's name, address and telephone number, the applicant's name and address, the Department Per mit File Number and the county in which the project is proposed;
- (2) A statement of how and when notice of the draft permit was received;
- (3) A description of any changes the commenter proposes for the draft permit;
- (4) A full explanation of the factual and legal reasons for each proposed change to the draft permit

b. Public Meeting

The Department may hold a public meeting if a significant request is received for a public meeting. Public notice of such a meeting shall be published by the applicant at least 30 days prior to the meeting.

When a public meeting is scheduled the public comment period is extended until the close of the public meeting. When a public meeting is held any person may submit oral or written statements and data at the meeting on the Department's proposed action.

c. <u>Issuance of the Permit</u>

The Department will make its decision regarding permit issuance after consideration of all written comments, including comments from the United States Environmental Protection Agency on surface water discharge aspects of the draft or proposed permit; the requirements of Chapter 403, F.S., and appropriate rules; and, if a public meeting is held, after consideration of all comments, statements and data presented at the public meeting. The Department will respond to all significant comments in writing. The Department's response to significant comments will be included in the administrative record of the permit and will be available for public inspection at the above named District office of the Department.

Unless a request for a administrative hearing, or an extension of time to file a petition for an administrative hearing, as indicated in d. below, is granted, the Department will take final agency action by issuing the permit or denying the permit application. If an administrative hearing is convened, final agency action will be based on the outcome of the hearing.

d. Administrative Hearing

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any other person must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the Department's permit identification number and the county in which the subject matter or activity is located;
- (b) a statement of how and when each petitioner received notice of the Department's action;
- (c) a statement of how each petitioner's substantial interests are affected by the department's action;
- (d) a statement of the material facts disputed by the petitioner, if any;
- (e) a statement of facts that the petitioner contends warrant reversal or modification of the Department's action;
- (f) a statement of which rules or statutes the petitioner contends require reversal or modification of the Department's action; and
- (g) and a statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

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Florida Department of Environmental Protection

 Rick Scott Governor

Jennifer Carroll Lt. Governor

Herschel T. Vinyard Jr. Secretary

May 16, 2012

BY ELECTRONIC MAIL

dwane.brumfield@taminco.com

In the Matter of an Application for Permit by:

Taminco Inc. Dwane Brumfield, Site Manager 4575 Highway 90 East Pace, FL. 32592 Permit No. FL0002313 DEP File No. FL0002313-010-IW1S Santa Rosa County

NOTICE OF PERMIT

Enclosed is Permit Number FL0002313 to continue to operate the Taminco Inc., Pace Plant Facility. The permit is issued under Chapter 403, Florida Statutes.

Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any.

Any party to this order (permit) has the right to seek judicial review of the permit action under Section 120.68, Florida Statutes, by the filing of a notice of appeal under Rules 9.110 and 9.190, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within 30 days from the date when this document is filed with the Clerk of the Department.

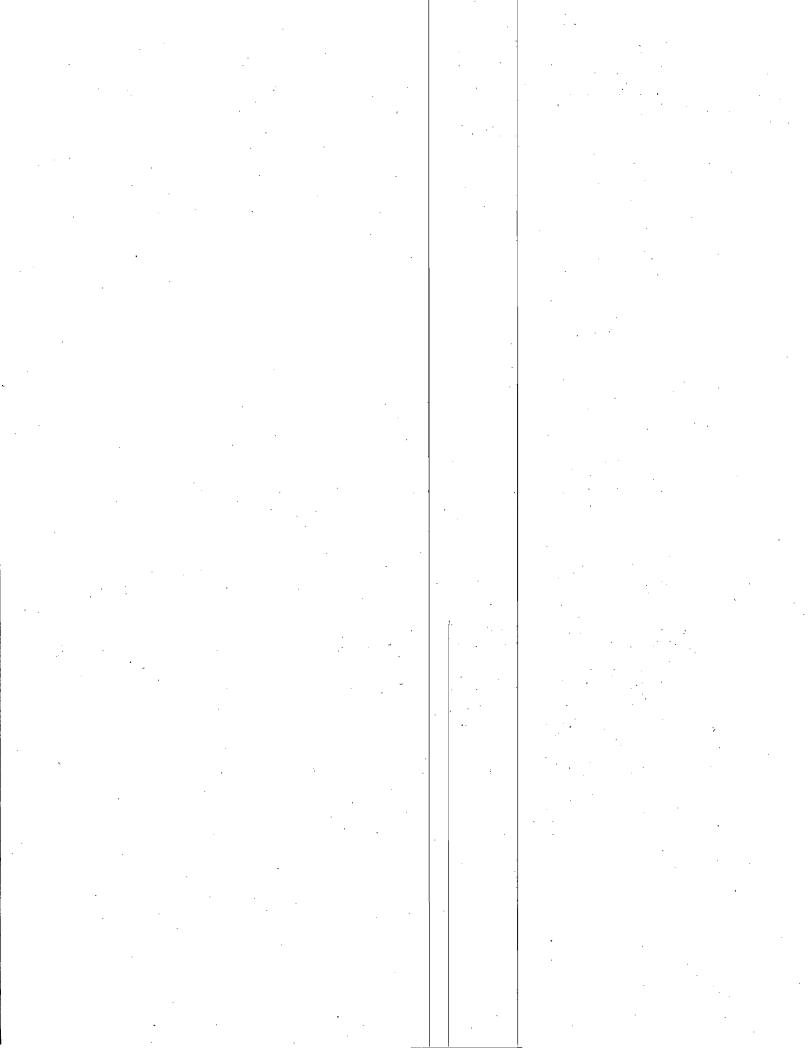
Executed in Pensacola, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

David P. Morres

Program Administrator

Vater Facilities



Taminco Inc. File No. FL0002593-010-IW1S Page 2

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this NOTICE OF PERMIT and all copies were mailed electronically before the close of business.

FILING AND ACKNOWLEDGMENT

FILED, on this date, under Section 120.52, Florida Statutes, with the designated deputy clerk, receipt of which is hereby acknowledged.

Olohlus Luungtons May 16, 2012 [Clerk Date]

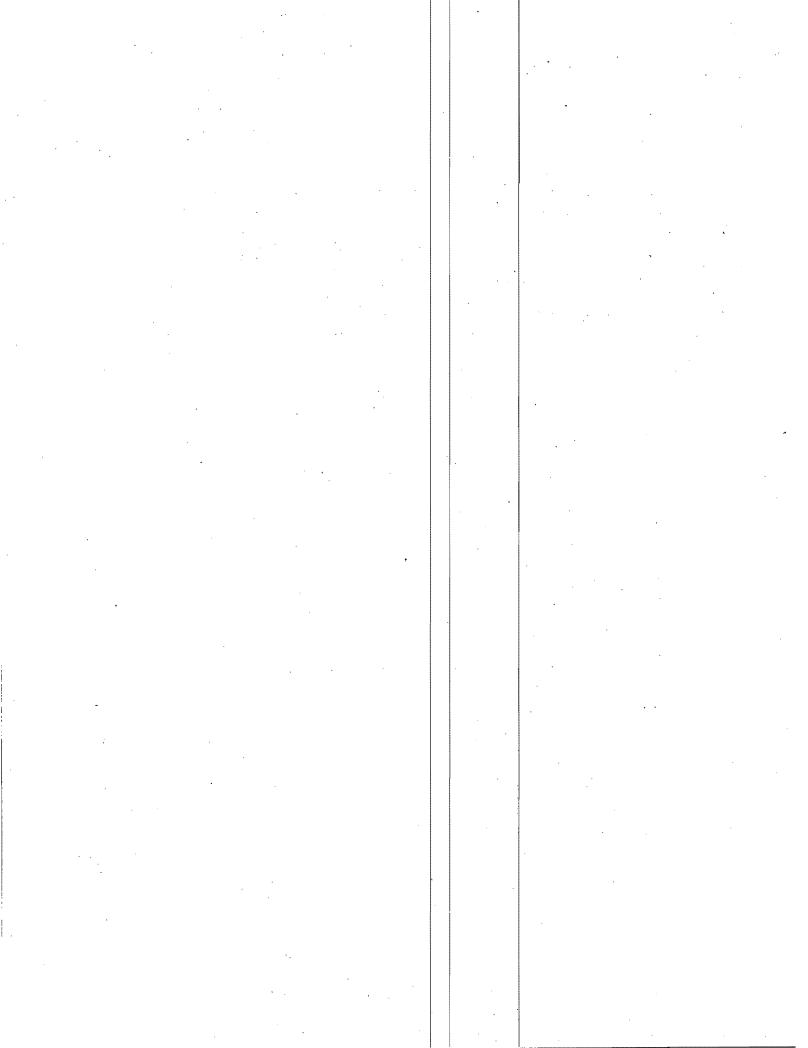
Attach:

Permit No. FL0002313 DMR Sheets

Copies furnished to:

Reba Heath, Taminco (Reba.Heath@taminco.com)
Robert Lunardini, Jr., URS Corp. (robert.lunardini@urscorp.com)
Virginia Buff, U.S. EPA Region IV (Buff.Virginia@epamail.epa.gov)
NWFWMD, Duncan J. Cairns (duncan.cairns@nwfwmd.state.fl.us)
Santa Rosa County Board of Commissioners (comm-salter@co.santa-rosa.fl.us)
Carol Moore, Pensacola Gulf Coast Keepers (Gckeeperrivers@cs.com)
Toni Edwards, DEP Pensacola
Chair, Santa Rosa County Commissioners (comm-lynchard@santarosa.fl.gov)
Santa Rosa County Department of Health (anne_anderson@doh.state.fl.us)

Santa Rosa County Department of Health (anne_anderson@doh.state.fl.u Linda Young, Clean Water Network (llyoung@igc.org)





Florida Department of Environmental Protection

Northwest District 160 W. Government Street, Suite 308 Pensacola, Florida 32502-5740 Rick Scott Governor

Jennifer Carroll Lt. Governor

Herschel T. Vinyard Jr. Secretary

INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:

Taminco Inc. Two Windsor Plaza, Suite 411 7540 Windsor Drive Allentown, PA 18195 PERMIT NUMBER: FILE NO.:

FL0002313 (Major) FL0002313-010-IW1S

ISSUANCE DATE: EXPIRATION DATE: May 16, 2012 May 15, 2017

RESPONSIBLE AUTHORITY:

Mr. Dwane Brumfield, Site Manager

FACILITY:

Taminco Inc., Pace Plant 4575 Highway 90 East Pace, FL. 32571

Santa Rosa County

Latitude: 30° 34' 05" N Longitude: 87° 09' 05" W

This permit is issued under the provisions of Chapter 403.088(2)(f) and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. The above named Permittee is hereby authorized to construct and operate the facilities shown on the application and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

WASTEWATER TREATMENT:

The existing system is a wastewater treatment system for the industrial wastewaters generated by the Pace Plant of Taminco Inc. (Taminco). Individual production facilities operated by TAMINCO include two plants for the production of methylamines, two plants for the production of higher amines, a dimethylamine production area and a utilities area containing water treatment and boilers. TAMINCO also operates the co-generation facility owned by Gulf Power Co. Air Products and Chemicals (APCI) continues to operate the liquid hydrogen terminal and the groundwater remediation project in Area B. The liquid hydrogen terminal will have a de minimis discharge into the treatment system.

Wastewater treatment includes neutralization of the wastewater, equalization, anaerobic treatment, aerobic treatment and final percolation in the site Rapid Infiltration Basins (RIBs). Facility modifications, completed by the former owner, APCI, reduced the effluent impact on Escambia Bay of nutrients and oxygen depleting substances by eliminating effluent discharge to Escambia Bay except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events. During the last permit term, APCI constructed three (3) additional Rapid Infiltration Basins (RIBs) that substantially increased the disposal capacity of the land application system. APCI, also, shut down the methanol, ammonia, nitric acid and ammonium nitrate plants. The individual plants shutting down resulted in a reduction of process wastewater flow from 0.41 MGD to 0.22 MGD. The total design capacity remains at 1.23 MGD monthly average daily flow (MADF) with 1.23 MGD MADF discharging to the percolation pond system and an estimated 0.00 MGD MADF discharging to Escambia Bay. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

Taminco Inc.
Pace Plant

Page 2

PERMIT NUMBER:

FL0002313

FILE No.:

FL0002313-010-IW1S

EFFLUENT DISPOSAL:

Surface Water Discharge:

The point of discharge to Escambia Bay, Class III marine waters, via Outfall D-001, is located approximately at latitude 30° 34' 05" N, longitude 87° 09' 05" W. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

Underground Injection: Not applicable.

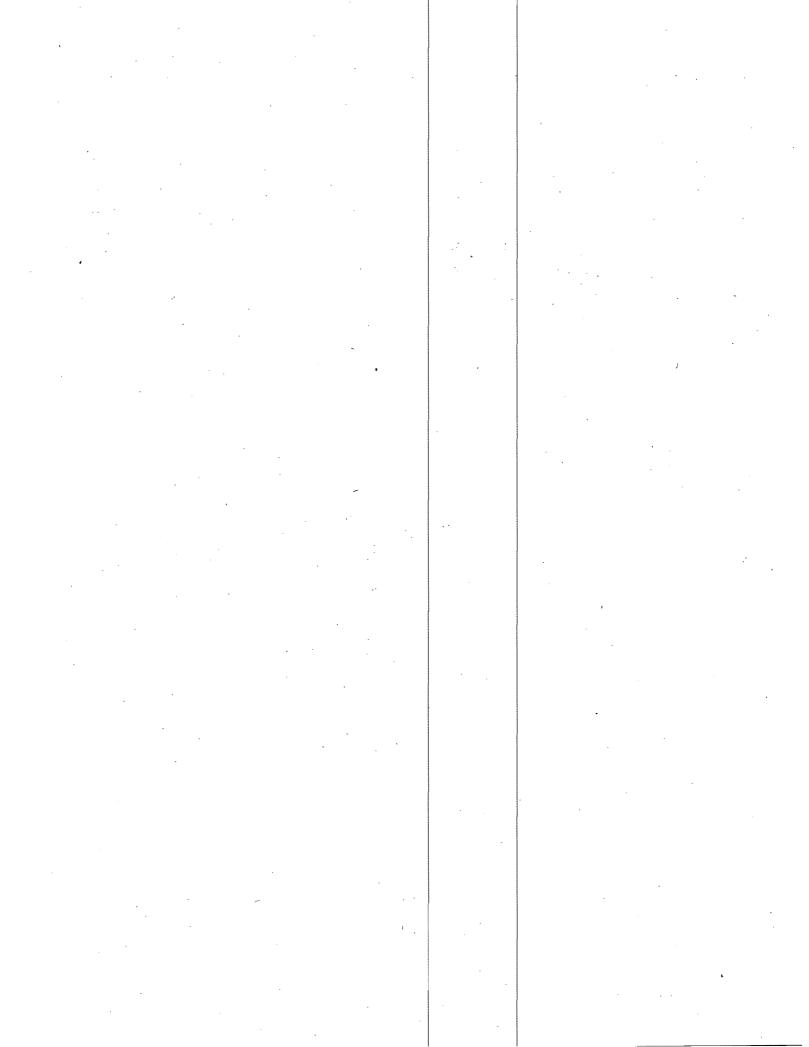
Land Application:

G-001, a 1.23 MGD MADF permitted discharge to 7 percolation ponds located approximately at latitude: 30° 34′ 47″ N, longitude: 87° 08′ 11″ W

Reuse:

Not applicable.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Part I through Part VIII, pages 3 through 19 of this permit.



Taminco Inc.
Pace Plant
Page 3

PERMIT NUMBER:

FL0002313

FL0002313-010-IW1S

FILE No.:

I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

1. The permittee is authorized to discharge from Outfall D-001, process wastewater, cooling tower blowdown, and stormwater runoff from areas associated with industrial activity, and ground water. Surface water discharges shall be limited to the amount in excess of the land application system capacity associated with 25 year, 24 hour daily rainfall event or equivalent chronic rainfall events. Such discharge shall be limited and monitored by the permittee as specified below:

Parameters	Effluent Limitations			Мо	nitoring Requiren	nents
	Monthly Average	Daily Maximum	Other	Freq.	Sample Type	Sample Location
Flow (MGD)	Report	Report	па	Continuous	Recorder	EFF-1
pH (SU)	na	· na	6.5 to 8.5	Daily	Grab	EFF-1
Total Ammonia (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrate (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrogen, Total (MG/L)	Report	Report		1/week	Calculated	EFF-1
Total Phosphorus (MG/L as P)	Report	Report	Report (lbs/day as P)	l/week	Grab	EFF-1
Total Suspended Solids (MG/L)	30	60	Report (lbs/day)	1/week	Grab	EFF-1
CBOD ₅ , (MG/L)	30 .	60	Report (lbs/day)	1/week	Grab	EFF-1
Total Recoverable Copper (UG/L)	na	na	Max 3.7 ug/l wqs	1/week	Grab	EFF-1
Rainfall (inches)	na	na	Report	Daily	24 Hour Total	
Whole Effluent Toxicity	See below					
OCPSF 40CFR414.91 Parameters	See below					

OCPSF 40CFR414.91 Parameters - If there is a discharge the permittee shall initiate the series of tests described below to evaluate the compliance with effluent limitations of 40CFR414.91 (OCPSF) for the discharge of toxic pollutants from Outfall D-001. These tests are required one time per calendar year for all discharge events.

The discharge must not exceed the concentration of the toxic pollutants listed below:

Outfall D-001	Discharge Limitations			Monitor	ing Require	ments
40CFR414.91 (OCPSF) Limits						٠.
Parameter (all units mg/l unless noted otherwise)	Monthly Average	· Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
1,1,1-Trichloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
1,1,2-Trichloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
1,1-Dichloroethane	0.0039	0.0106	na	l/year	Grab	EFF-1
1,1-Dichloroethylene	0.0029	0.0045	na	l/year	Grab	EFF-1
1,2,4-Trichlorobenzene	0.0122	0.0250	na	1/year	Grab	EFF-1
1,2-Dichlorobenzene	0.0138	0.0292	na	1/year	Grab	EFF-1
1,2-Dichloroethane	0.0122	0.0377	na	1/year	Grab	EFF-1
1,2-Dichloropropane	0.0274	0.0411	na	1/year	Grab	EFF-1
1,2-trans-Dichloroethylene	0.0038	0.0097	na.	1/year	Grab	EFF-1
1,3-Dichlorobenzene	0.0055	0.0079	na	1/year	Grab	EFF-1
1,3-Dichloropropylene [1,3-Dichloropropene]	0.0052	0.0079	na ·	1/year	Grab	EFF-1
1,4-Dichlorobenzene	0.0027	0.0050	na ·	1/year	Grab	EFF-1
2,4-Dichlorophenol	0.0070	0.0200	na	1/year	Grab	EFF-1
2,4-Dimethylphenol	0.0032	0.0064	na	l/year	Grab	EFF-1

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Taminco Inc. Pace Plant Page 4

PERMIT NUMBER: FILE No.:

FL0002313 FL0002313-010-IW1S

I.A.1 continued:

Outfall D-001	Di	scharge Limita	ations	Monitor	ing Require	nents
40CFR414.91 (OCPSF) Limits			·		*,	
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
2,4-Dinitrophenol	0.0127	0.0220	na	l/year-	Grab	EFF-1
2,4-Dinitrotoluene	0.0202	0.0510	na	l/year	Grab	EFF-1
2,6-Dinitrotoluene	0.0456	0.1147	na	l/year	Grab	EFF-1
2-Chlorophenol	0.0055	0.0175	na	1/year	Grab	EFF-1
2-Nitrophenol	0.0073	0.0123	na ,	1/year	Grab	EFF-1
3,4-Benzofluoranthene [benzo(b)fluoranthene]	0.0041	0.0109	na	1/year	· Grab	EFF-1
4,6-Dinitro-o-Cresol	0.0140	0.0495	na	l/year	Grab	EFF-1
4-Nitrophenol	0.0129	0.0222	na	1/year	Grab	EFF-1
Acenaphthene	0.0039	0.0106	na	l/year	· Grab	EFF-1
Acenaphthylene	wqs	wqs	*0.031 μg/l*	1/year	Grab	EFF-1
Acrylonitrile	0:0172	0.0433	na	l/year	Grab	EFF-1
Anthracene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Benzene	0.0066	0.0243	na	1/year	Grab	EFF-1
Benzo(a) Anthracene	wqs	wqs	*0.031 μg/l*	l/year	Grab	EFF-1
Велzo(a) Pyrene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Benzo(k) Fluoranthene	wqs	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
bis(2-Ethylhexyl)Phthalate	0.0184	0.0499	na	1/year	Grab	EFF-1
Carbon Tetrachloride	0.0032	0.0068	na	1/year	Grab	EFF-1
Chlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Chloroethane	0.0186	0.0479	па	l/year	Grab	EFF-1
Chloroform	0.0038	0.0082	na	1/year	Grab	EFF-1
Chrysene	wqs	Wqs	*0.031 _, µg/l [#]	1/year	Grab	EFF-1
Di-n-Butyl Phthalate	0.0048	0.0102	na	1/year	Grab	EFF-1
Diethyl Phthalate	0.0145	0.0363	na	l/year	Grab	EFF-1
Dimethyl Phthalate	0.0034	0.0084	na	l/year	Grab	EFF-1
Ethylbenzene	0.0057	0.0193	, na	l/year	Grab	EFF-1
Fluoranthene :	0.0045	0.0122	na	l/year	Grab	EFF-1
Fluorene	wqs	wqs	*0.031 µg/l#	1/year	Grab	EFF-1
Hexachlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Hexachlorobutadiene	0.0036	0.0088	na	1/year	Grab	EFF-1
Hexachloroethane	0.0038	0.0097	na _.	l/year	Grab	EFF-1
Methyl Chloride	0.0154	0.0340	na	1/year	Grab	EFF-1
Methylene Chloride	0.0072	0.0159	па	1/year	Grab	EFF-1
Naphthalene	0.0039	0.0106	na	1/year	Grab	EFF-1
Nitrobenzene	0.0048	0.0122	na	l/year	Grab	EFF-1

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I.A.1. continued:

40CFR414.91 (OCPSF) Limits	D	ischarge Limitat	tions	Monitori	ng Requirem	ents
Parameter (units mg/l unless noted)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
Phenanthrene	wqs	wqs	*0.031 µg/l#	1/year	, Grab	EFF-1
Phenol	0.0027	0.0047	na	1/year	Grab	EFF-1
Pyrene	wqs	wqs	*0.031 µg/l*	l/year	Grab	EFF-1
Tetrachloroethylene	wqs	wqs	Mx 8.85 μg/l*	1/year	Grab	EFF-1
Toluene	0.0047	0.0143	na	1/year	Grab	EFF-1
Total Recoverable Cyanide	wqs	wqs	Max 1.0 μg/l	1/year	Grab	EFF-1
Total Recoverable Chromium	wqs	. wqs	Max 50 μg/l	1/year	Grab	EFF-1
Tot Rec Copper (UG/L)	wqs	wqs	Max 3.7 ug/l	l/week	Grab	EFF-1
Total Recoverable Lead	wqs	wqs	Max 8.5 μg/l	1/year	Grab	EFF-1
Total Recoverable Nickel	wqs	wqs	Max 8.3 μg/l	l/year	Grab.	EFF-1
Total Recoverable Zinc	wqs	wqs	Max 86.0 μg/l	1/year	Grab	EFF-1
Trichloroethylene [ethene]	0.0038	0.0097	na	1/year	Grab	EFF-1
Vinyl Chloride	0.0186	0.0479	na	1/year	Grab	EFF-1

^{*} See Part # I.A.7.

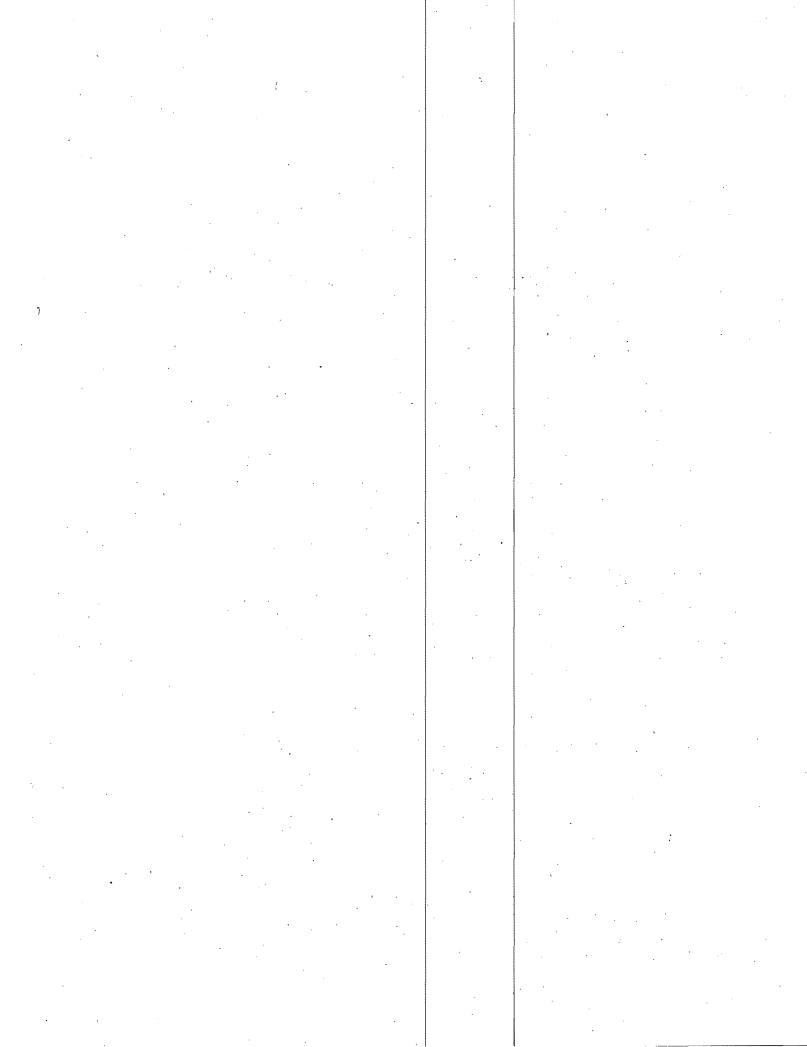
Notes: wqs - Those parameters with the maximum concentrations marked as "wqs" are limited by the more stringent water quality standard as indicated in the "Other" column. [62-302.530(28),(30),(57),(9),(17),(37),(64),(69), FAC]

2. Effluent samples for Outfall # D-001 shall be taken at locations listed in Permit Condition I.A.1. and described below:

Monitoring Location (Sample Point) WAFR Site Number	Description of Monitoring Location
EFF-1	Alpha Pond Parshall Flume Discharge

- 3. If a discharge to Escambia Bay occurs, the permittee shall submit a report to the Department within 30 days following the discharge as specified in Section I.E. The report shall include the cause and nature of the discharge, the duration of the discharge and the total gallons discharged. The report shall include rainfall measurement data and calculations to demonstrate that the discharge was due to the rainfall event.
- 4. There shall be no discharge of floating solids or visible foam in such amounts as to form nuisances. [62-302.500(1), FAC]
- 5. The discharge shall not cause a visible sheen defined as iridescence, nor shall be present so as to cause taste or odor, or otherwise interfere with the beneficial use of receiving water. [62-302.530(50)(b), FAC]
- 6. The pH shall be monitored as required by I.A.1.. The pH values shall not deviate outside the range of 6.5 to 8.5 standard units more than 1% of the time in any calendar month and no individual excursion shall exceed 60 minutes. An "excursion" is an unintentional and temporary incident in which the pH value of discharged wastewater exceeds the range set forth in the permit.
- 7. 62-302.530, F.A.C. limits the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs): Acenaphthylene, Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi)perylene, Benzo(k) Fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3cd)pyrene, and Phenanthrene to < 0.031 ug/l on an annual average basis. As they were in the last permit, the additional PAHs are added to this list to be < 0.031 ug/l: Anthracene, Fluorene, and Pyrene.
- 8. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.A. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge with the receiving water.
- 9. Reopener Clause: The permit may be reopened pursuant to rule 62-620.325, FAC to adjust effluent limitations or monitoring requirements if information received indicates a need for different limitations or monitoring requirements, such as but not limited to results from water quality studies, TMDLs or DEP approved changes in water quality standards.

^{# -} Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12-month rolling annual average basis. [62-302.530 Note (1), FAC]



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- 10. Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12 month rolling annual average basis. [62-302.530 Note (1),FAC]
- 11. For those parameters for which monitoring is required once per month or less frequently than once a month, if the single sample exceeds the monthly average limit, additional samples may be taken to demonstrate compliance with the monthly average limits. Otherwise, the single sample shall be used to calculate the monthly average and daily maximum. If more than one sample is taken in a given month, the monthly average of all samples taken during that month shall be reported.
- B. Underground Injection Control Systems Not applicable

C. Land Application Systems

1. The Discharge from Land Application System <u>G-001</u> shall be limited and monitored by the Applicant as specified below at the monitoring point related to the discharge location to the percolation pond system in use at the time of sampling which could be EFF-3 or EFF-4:

G-001 (WAFR 37240)		Discharge Lin	nitations	M	Ionitoring Requirement	nts
Parameters (units)	Mo Avg.	Daily Max.	Other -specify	Frequency	Sample Type	Sam Pnt
2,4-Dinitrotoluene, (µg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4
2,6-Dinitrotoluene, (µg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4
CBOD ₅ , (mg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4
Chemical Oxygen Dem, COD, (mg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4
Flow, (MGD)	Report	Report	na	Continuous	Recorder	EFF-3, 4
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Organic Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4
pH, (standard units)	па	na	Report min & max	5/week	Grab	EFF-3, 4
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Dissolved Solids TDS, mg/l	Report .	Report	na .	weekly	24 hour composite	EFF-3, 4
Tot. Kjeldahl Nitr. TKN, (mg/l as N)	Report	Report	па	weekly	24 hour composite	EFF-3, 4
Total Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Suspended Solids, (mg/l)	Report	Report	na ·	weekly	24 hour composite	EFF-3, 4

- 2. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.C.1. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge to the land application system.
- 3. Effluent samples for disposal system # G-001 shall be taken at the monitoring site locations listed in Permit Condition I.C.1. described below:

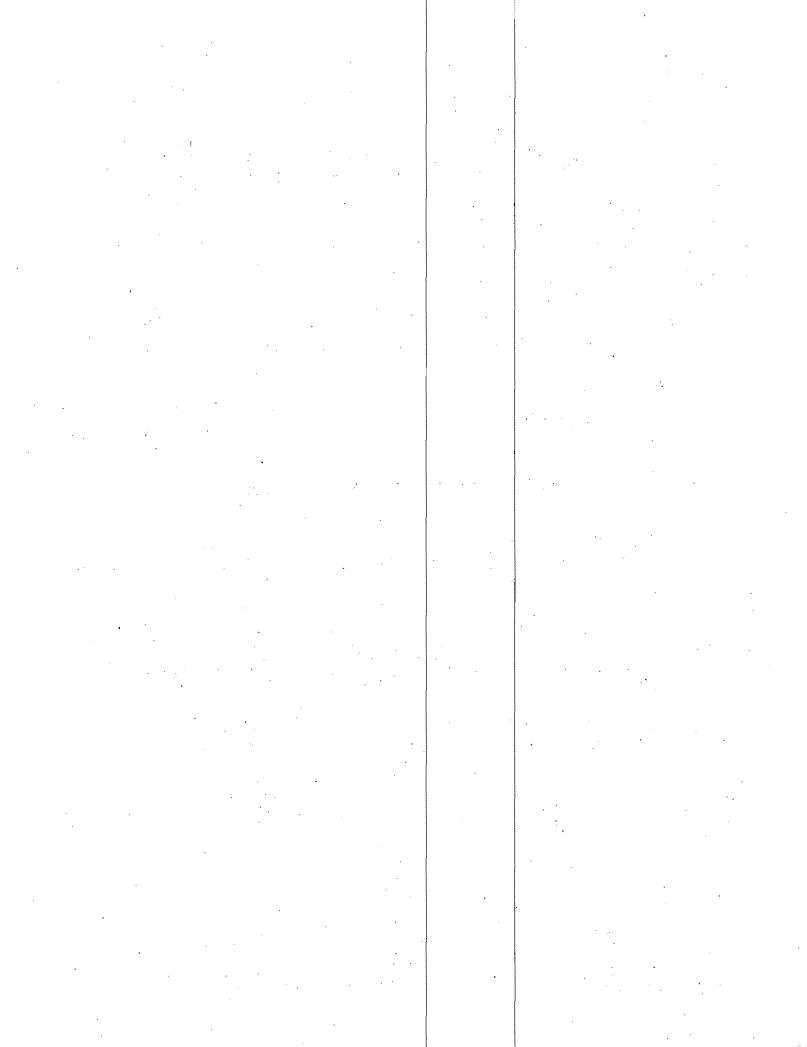
Monitoring Location (Sample Point)	Description of Monitoring Location
EFF-3	Bravo Pond discharge to percolation ponds
EFF-4	Echo Pond discharge to percolation ponds

D. Other Methods of Disposal or Recycling

1. There shall be no discharge of industrial wastewater from this facility to ground water or surface waters, except as authorized by this permit.

E. Other Limitations and Monitoring and Reporting Requirements

The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" is available at http://www.dep.state.fl.us/labs/guidance/index.htm.



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The MDLs and POLs as described in this list shall constitute the minimum acceptable MDL/POL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:

- a) The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
- b) The laboratory reported MDL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide a MDL, which is equal to or less than the applicable water quality criteria stated in 62-302 F.A.C.;
- c) If the MDLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used.

When the analytical results are below method detection or practical quantification limits, the permittee shall report the actual laboratory MDL and/or POL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the permittee may request approval of alternate methods or for alternative MDLs and PQLs for any approved analytical method. Approval of alternate laboratory MDLs and PQLs are not necessary if the laboratory reported MDLs and POLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is in accordance with 40 CFR 136.

- 2. Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method to assure compliance with applicable water quality standards and effluent limitations in accordance with 40 CFR Part 136. All monitoring shall be representative of the monitored activity.
- Monitoring requirements under this permit are effective on the first day of the second month following permit issuance. Until such time, the permittee shall continue to monitor and report in accordance with previously effective permit requirements, if any. During the period of operation authorized by this permit, the permittee shall complete and submit to the Northwest District Office Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this permit. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	DMR Due Date
Monthly or Toxicity	first day of month – last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semi-annual	January 1 – June 30 July 1 – December 31	July 28 January 28
Annual	January 1 – December 31	January 28

DMRs shall be submitted for each required monitoring period including months of no discharge.

The permittee shall make copies of the attached DMR form(s) and shall submit the completed DMR form(s) to the Department at the address specified below:

Florida Department of Environmental Protection

Wastewater Compliance Evaluation Section, Mail Station 3551

Twin Towers Office Building

2600 Blair Stone Road

Tallahassee, Florida 32399-2400

Unless specified otherwise in this permit, all other reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to, as appropriate, the Northwest District Office of the Department at the address specified below:

> Florida Department of Environmental Protection Northwest District Office 160 W. Government St., Suite 308 Pensacola, FL 32502-5740

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- 5. All reports and other information shall be signed in accordance with requirements of Rule 62-620.305, F.A.C
- 6. The permittee shall provide safe access points for obtaining representative samples which are required by this permit.
- 7. If there is no discharge on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.
- 8. Any bypass of the treatment facility which is not included in the monitoring specified in sections I.A, I.B, I.C, or I.D, is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reportable data. All monitoring results shall be reported on the appropriate DMR.

F. Whole Effluent Toxicity Testing

1. The permittee shall comply with the following requirements to evaluate acute whole effluent toxicity of the discharge from outfall D-001.

a. Effluent Limitation

(1) In any routine or additional follow-up test for acute whole effluent toxicity, the 96-hour LC50 shall not be less than 100% effluent. [Rules 62-302.200(1), 62-302.500(1)(a)4., 62-4.244(3)(a), and 62-4.241, F.A.C.]

b. Monitoring Frequency

(1) Routine toxicity tests shall be conducted annually, the first starting within 60 days of the issuance date of this permit and lasting for the duration of this permit.

c. Sampling Requirements

(1) All tests shall be conducted on a single grab sample of final effluent.

d. Test Requirements

- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12.5% effluent.
- (2) The permittee shall conduct 96-hour acute static renewal multi-concentration toxicity tests using the daphnid, **Ceriodaphnia dubia**, and the bannerfin shiner, **Cyprinella leedsi**, concurrently.
- (3) All test species, procedures and quality assurance criteria used shall be in accordance with Methods for Measuring Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, 5th Edition, EPA-821-R-02-012. Any deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and approval prior to use. In the event the above method is revised, the permittee shall conduct acute toxicity testing in accordance with the revised method.
- (4) The control water and dilution water shall be moderately hard water as described in EPA-821-R-02-012, Table 7.

e. Ouality Assurance Requirements

- (1) A standard reference toxicant (SRT) quality assurance (QA) acute toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or initiated no more than 30 days before the date of each routine or additional follow-up test conducted. Additionally, the SRT test must be conducted concurrently if the test organisms are obtained from outside the test laboratory unless the test organism supplier provides control chart data from at least the last five monthly acute toxicity tests using the same reference toxicant and test conditions. If the organism supplier provides the required SRT data, the organism supplier's SRT data and the test laboratory's monthly SRT-QA data shall be included in the reports for each companion routine or additional follow-up test required.
- (2) If the mortality in the control (0% effluent) exceeds 10% for either species in any test, the test for that species (including the control) shall be invalidated and the test repeated. The repeat test shall begin within 14 days after the last day of the invalid test.
- (3) If 100% mortality occurs in all effluent concentrations for either species prior to the end of any test and the control mortality is less than 10% at that time, the test (including the control) for that species shall be terminated with the conclusion that the test fails and constitutes non-compliance.
- (4) Routine and additional follow-up tests shall be evaluated for acceptability based on the concentration-response relationship, as required by EPA-821-R-02-012, Section 12.2.6.2., and included with the bioassay laboratory reports.

f. Reporting Requirements

(1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:

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(a) Routine Test Results: If an LC50 > 100% effluent occurs in the test for the test species, ">100%" shall be entered on the DMR for that test species. If an LC50 < 100% effluent occurs, the calculated LC50 effluent concentration shall be entered on the DMR for that test species.

(b) Additional Follow-up Test Results: For each additional test required, the calculated LC50 value shall be entered on the DMR for that test species.

- (2) A bioassay laboratory report for the routine test shall be prepared according to EPA-821-R-02-012, Section 12, Report Preparation and Test Review, and mailed to the Department at the address below within 30 days after the last day of the test.
- (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-012, Section 12, and mailed within 30 days after the last day of the second valid additional follow-up test.
- (4) Data for invalid tests shall be included in the bioassay laboratory report for the repeat test.
- (5) The same bioassay data shall not be reported as the results of more than one test.
- (6) All bioassay laboratory reports shall be sent to:

Florida Department of Environmental Protection

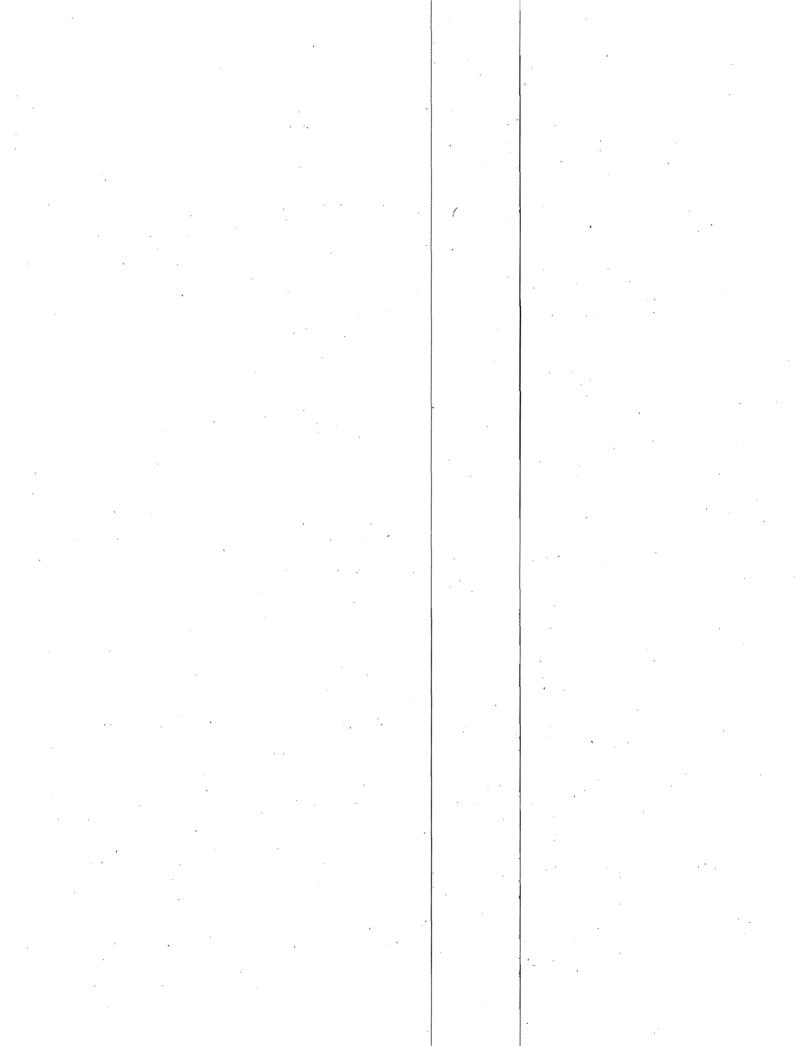
Northwest District Office

160 Government Street, Suite 308

Pensacola, Florida 32502-5740

g. Test Failures

- (1) A test fails when the test results do not meet the limits in 1.a.(1).
- (2) Additional Follow-up Tests:
 - (a) If a routine test does not meet the acute toxicity limitation in 1.a.(1) above, the permittee shall notify the Department at the address above within 21 days after the last day of the failed routine test and conduct two additional follow-up tests on each species that failed the test in accordance with 1.d.
 - (b) The first test shall be initiated within 28 days after the last day of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of two valid additional follow-up tests are completed. If there is not a discharge, collect additional follow-up samples during the next discharge event.
 - (c) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 75%, 50%, 25%, and 12.5% effluent. The permittee may modify the dilution series in the second additional follow-up test to more accurately bracket the toxicity such that at least two dilutions above and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be statistically analyzed according to the procedures in EPA-821-R-02-012.
- (3) In the event of three valid test failures (whether routine or additional follow-up tests) within a 12-month period, the permittee shall notify the Department within 21 days after the last day of the third test failure.
 - (a) The permittee shall submit a plan for correction of the effluent toxicity within 60 days after the last day of the third test failure.
 - (b) The Department shall review and approve the plan before initiation.
 - (c) The plan shall be initiated within 30 days following the Department's written approval of the plan.
 - (d) Progress reports shall be submitted quarterly to the Department at the address above.
 - (e) During the implementation of the plan, the permittee shall conduct quarterly routine whole effluent toxicity tests in accordance with 1.d. Additional follow-up tests are not required while the plan is in progress. Following completion or termination of the plan, the frequency of monitoring for routine and additional follow-up tests shall return to the schedule established in 1.b.(1). If a routine test is invalid according to the acceptance criteria in EPA-821-R-02-012, a repeat test shall be initiated within 14 days after the last day of the invalid routine test.
 - (f) Upon completion of four consecutive quarterly valid routine tests that demonstrate compliance with the effluent limitation in 1.a.(1) above, the permittee may submit a written request to the Department to terminate the plan. The plan shall be terminated upon written verification by the Department that the facility has passed at least four consecutive quarterly valid routine whole effluent toxicity tests. If a test within the sequence of the four is deemed invalid, but is replaced by a repeat valid test initiated within 14 days after the last day of the invalid test, the invalid test will not be counted against the requirement for four consecutive quarterly valid routine tests for the purpose of terminating the plan.
- (4) The additional follow-up testing and the plan do not preclude the Department taking enforcement action for whole effluent toxicity failures. [62-4.241, 62-620.620(3)]



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II. Industrial Sludge Management Requirements

A. Basic Management Requirements

- 1. The method of disposal for sludge or residuals generated by the treatment of industrial wastewaters by this facility is to a Class I solid waste landfill.
- 2. Disposal of sludge in a solid waste management facility permitted by the Department shall be in accordance with the requirements of Chapter 62-701, F.A.C.
- 3. The permittee shall keep records of the amount of sludge or residuals disposed, transported, or incinerated in dry tons/day. If a person other than the permittee is responsible for sludge transporting, disposal, or incineration, the permittee shall also keep the following records:
 - a. name, address and telephone number of any transporter, and any manifests or bill of lading used.
 - b. name and location of the site of disposal, treatment, or incineration
 - c. name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.

III. Groundwater Monitoring Requirements

- 1. During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit and the approved ground water monitoring plan.
- 2. The following monitoring wells are included in the ground water monitoring plan for the Plant A and Plant B wastewater treatment pond areas.

Well Name	Old ID	WAFR No.	Depth	Aquifer	Well Type	New/Existing
Plant Area A Monitoring Wells						
MWB-A1	A-1	1578	90	Surficial	Background	Existing
MWI-A2	A-2	1577	75	Surficial	Intermediate	Existing
MWC-A3	A-3	1576	64	Surficial	Compliance	Existing
Plant Area B Monitoring Wells						•
MWB-1		46352	100	Surficial - Shallow	Background	Existing
MWB-PW5	PW-5	46353	265	Surficial - Deep	Background	Existing
MWI-BI .	B-1 ·	1575	100	Surficial - Shallow	Intermediate	Existing
MWI-B5	B-5	1568	55	Surficial - Shallow	Intermediate	Existing
MWI-E5	E-5	1570	48	Surficial - Shallow	Intermediate	Existing
MWI-PW7	PW-7	46354		Surficial - Deep	Intermediate	Existing
MWI-E1(S)	E-1(S)	46359	48	Surficial - Shallow	Intermediate	Existing
MWI-E2(S)	E-2(S)	46360	. 42	Surficial - Shallow	Intermediate	Existing
MWI-E6(S)	E-6(S)	46361	37	Surficial - Shallow	Intermediate	Existing
MWC-B4	B-4	1569	25	Surficial - Shallow	Compliance	Existing
MWC-E3	E-3	1572	35	Surficial - Shallow	Compliance	Existing
MWC-2		46358	160	Surficial - Deep	Compliance	Existing
MWC-303	SW-303	48229	150	Surficial - Deep	Compliance	Existing
MWI-17R		48227		Surficial - Shallow	Intermediate	Existing
MWC-20R		48228		Surficial - Shallow	Compliance	Existing

3. A zone of discharge is established for the Plant A and Plant B wastewater treatment pond areas, more specifically described as follows:

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The zone of discharge for Plant A wastewater treatment pond areas shall be 1,000 feet in the direction of groundwater flow and 500 feet in other directions.

The zone of discharge for Plant B wastewater treatment pond areas and the percolation pond shall be the shoreline in the direction of groundwater flow as monitored by a compliance well and 500 feet in other directions or the facilities property boundary whichever is less as monitored by a compliance well.

[62-520.200(27), 62-520.461, and 62-520.465]

4. The wells included in the ground water monitoring plan shall be sampled for the parameters, and at the frequencies listed below:

Parameters (units)	Monitoring Requirements			
	Compliance Well Limits ¹	Frequency	Sample Type Grab Grab	
2,4-Dinitrotoluene, (μg/l)	** Report	Quarterly		
2,6-Dinitrotoluene, (μg/l)	** Report	Quarterly		
Nitrate - Nitrite, (mg/l as N)	10.0 mg/l	Quarterly	Grab	
Organic Nitrogen, (mg/l as N)	Report	Quarterly	Grab	
pH (standard units)	Report	Quarterly	Field	
Sodium (mg/l)	160.0	Quarterly	Grab	
Specific conductance (µmhos/cm)	Report	Quarterly	Field	
Temperature (degrees C)	Report	Quarterly	Field	
Total Ammonia, (mg/l as N)	Report	Quarterly	Grab	
Total Dissolved Solids (TDS)(mg/l)	Report	Quarterly	Grab	
Total Kjeldahl Nitrogen, TKN, (mg/l as N)	Report	Quarterly	Grab	
Total Nitrogen, (mg/l as N)	Report	Quarterly	Grab	
Total Organic Carbon, (mg/l)	Report	Quarterly	Grab	
Total Phosphorus, (mg/l as P)	Report	Quarterly	Grab	
Turbidity (NTUs)	Report	Quarterly	Field	
VOC, (μg/l)	Report any detected	Quarterly	Grab	
Trichloroethene, (µg/l)	', 3 μg/l	Quarterly	Grab	
1,2-Dichloroethane, (µg/l)	3 μg/l	Quarterly	Grab	
cis-1,2-Dichloroethene, (µg/l)	70 μg/l	Quarterly	Grab	
Water level (MSL)	Report	Quarterly	In-situ (see III.5.)	

Compliance with Part III.4. and IV.1. of this permit is not required for the Plant Area B wells during the active term of the Division of Waste Management Consent Order OGC File No. 94-1833 (or any subsequent revisions to or revised versions of the Consent Order) for compliance wells or the zone of discharge subject to the requirements of Consent Order No. 94-1833.

- ** Division of Waste Management Consent Order OGC File No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (µg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. This permit does not alter substantive or procedural requirements of that Consent Order.
- 5. Water levels shall be recorded prior to evacuating the well for sample collection. Measurements, referenced to mean sea level, shall include the top of the well casing, depth to ground water, and the calculated ground water elevation at a precision of plus or minus 0.01 feet.
- 6. Ground water monitoring wells shall be evacuated or purged prior to sampling to obtain a representative sample. All sampling procedures shall be in accordance with the DEP standard operating procedures for the collection of ground water samples.

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- Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions.
- If a monitoring well becomes damaged or cannot be sampled for some reason, the permittee shall notify the Department with a 8. written report within seven days detailing the circumstances and remedial measures taken or proposed. Replacement of monitoring wells shall be approved in advance by the Department.
- Ground water monitoring test results shall be submitted on attached form Groundwater Monitoring Report Part D and shall be submitted in conjunction with the DMR in accordance with condition I. E.2.

Other Land Application Requirements

- The permittee's discharge to ground water shall not cause a violation of water quality standards for Class G-II ground waters 1. at the boundary of the zone of discharge in accordance with rules 62-520.400 and 62-520.420, 62-520.520(1), F.A.C.. This facility has "existing installation" status and is exempt from compliance with secondary drinking water standards.
- 2. The permittee's discharge to ground water shall not cause a violation of the minimum criteria for ground water specified in rule 62-520.400, F.A.C., within the zone of discharge.

Operation and Maintenance Requirements V.

Operation of Treatment and Disposal Facilities

- 1. The permittee shall ensure that the operation of this facility is as described in the application and supporting documents.
- The operation of the pollution control facilities described in this permit shall be under the full time supervision of a person 2. who is qualified by formal training and/or practical experience in the field of water pollution control.
- The permittee shall notify the Department in writing within seven days after there is a discharge via outfall D-001 on account 3. of 25 year, 24 hours storm events or equivalent chronic rainfall events that exceed the capacity of the land application system. Such notices shall include rainfall measurement data and provide calculations to demonstrate that the discharge was due to the rainfall event and estimate the expected duration of the surface water discharge. Thereafter, the permittee shall update the Department at least once every two weeks concerning the status of the discharge and any revised estimations of its duration.

Record keeping Requirements:

The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:

- Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
- 2. Copies of all reports, other than those required in items 1. and 6. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;
- Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
- 4. A copy of the current permit;
- A copy of any required record drawings; 5.
- Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date on the 6. logs or schedule.

VI. **Schedules**

1. The permittee shall achieve compliance with the other conditions of this permit as follows:

Operational level attained Issuance Date of permit

No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

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VII. Other Specific Conditions

A. Specific Conditions Applicable to All Permits

- 1. Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Northwest District Office, are made a part hereof.
- 2. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
- 3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
- 4. The permittee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater or sludge. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.

B. Specific Conditions Related to Best Management Practices

1. BMP Plan:

For purposes of this part, the terms "pollutant" or "pollutants" refer to any substance listed as toxic under Section 307(a)(1) of the Clean Water Act (the "Act"), oil, as defined in Section 311(a)(1) of the Act, and any substance listed as hazardous under Section 311 of the Act. The permittee shall develop and implement a Best Management Practices (BMP) plan which prevents, or minimizes, the potential for the release of pollutants from ancillary activities, including material storage areas; plant site runoff; in-plant transfer, process and material handling areas; loading and unloading operations; and sludge and waste disposal areas, to the waters of the State through plant site runoff; spillage or leaks; sludge or waste disposal; or drainage from raw material storage.

2. Implementation:

Not applicable.

3. General Requirements:

The BMP plan shall:

- a. Be documented in narrative form, and shall include any necessary plot plans, drawings or maps.
- b. Establish specific objectives for the control of pollutants.
 - (1) Each facility component or system shall be examined for its potential for causing a release of significant amounts of pollutants to waters of the State due to equipment failure, improper operation, natural phenomena such as rain or snowfall, etc.
 - (2) Where experience indicates a reasonable potential for equipment failure (e.g., a tank overflow or leakage), natural conditions (e.g., precipitation), or other circumstances to result in significant amounts of pollutants reaching surface waters, the plan should include a prediction of the direction, rate of flow, and total quantity of pollutants which could be discharged from the facility as a result of each condition or circumstance.
- c. Establish specific best management practices to meet the objectives identified under paragraph b of this subsection, addressing each component or system capable of causing a release of significant amounts of pollutants to the waters of the State, and identifying specific preventative or remedial measures to be implemented.
- d. Be reviewed by plant engineering staff and plant manager.

4. Documentation:

The permittee shall maintain the BMP plan at the facility and shall make the plan available to the Department upon request.

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5. BMP Plan Modification:

The permittee shall amend the BMP plan whenever there is a change in the facility or change in the operation of the facility which materially increases the potential for the ancillary activities to result in a discharge of significant amounts of pollutants.

6. Modification for Ineffectiveness:

If the BMP plan proves to be ineffective in achieving the general objective of preventing the release of significant amounts of pollutants to surface waters and the specific objectives and requirements under paragraphs b. and c. of item 3, the permit shall be subject to modification pursuant to rule 62-620.325, F.A.C., to incorporate revised BMP requirements.

C. Duty to Reapply

The permittee shall apply for renewal of this permit at least 180 days before the expiration date of the permit using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. The existing permit shall not expire until the Department has taken final action on the application renewal in accordance with the provisions of 62-620.335(3) and (4), F.A.C.

D. Specific Conditions Related to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- 1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) One hundred micrograms per liter,
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
 - b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels
 - (1) Five hundred micrograms per liter,
 - (2) One milligram per liter for antimony, or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

E. Reopener Clause

- 1. The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345, F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- 2. The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.
- 3. The Department may develop a Total Maximum Daily Load (TMDL) during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.

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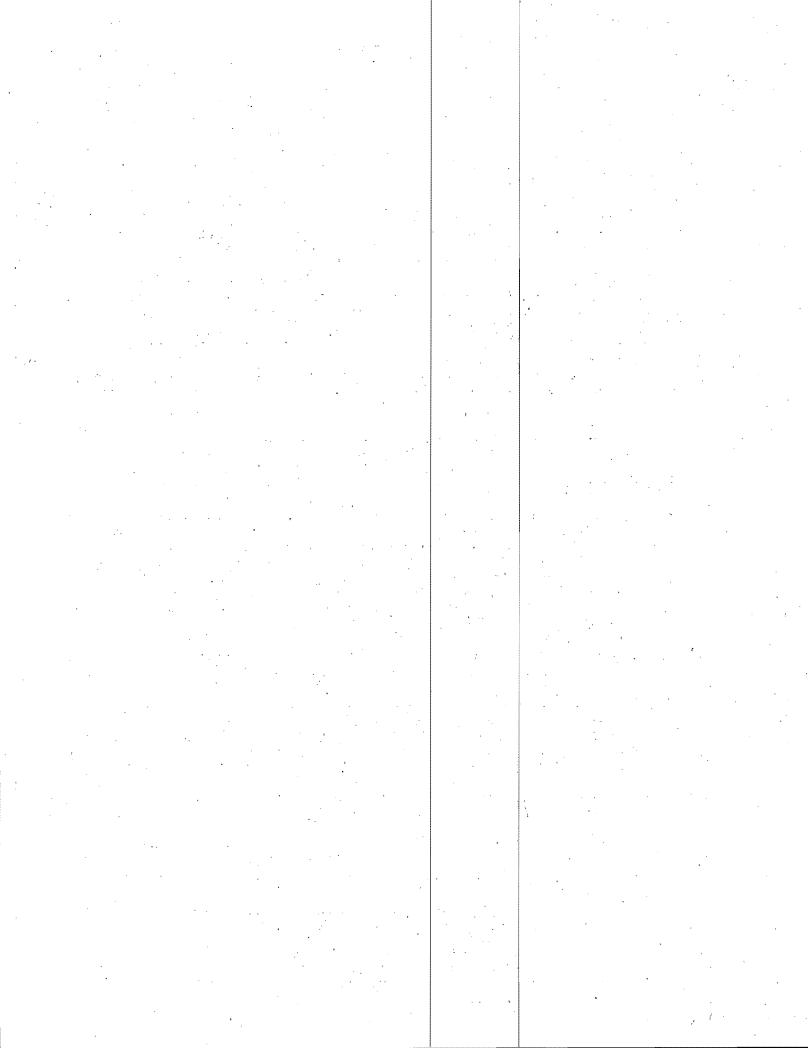
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VIII. GENERAL CONDITIONS

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, Florida Statutes. Any permit noncompliance constitutes a violation of Chapter 403, Florida Statutes, and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1)]

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviations from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2)]
- 3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3)]
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4)]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5)]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.610(6)]
- 7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7)]
- 8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8)]
- 9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to:
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and



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d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules. [62-620.610(9)]

- 10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, F.S., or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10)]
- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11)]
- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mVIIIing zone for the new or amended standard. [62-620.610(12)]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13)]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the transfer is approved by the Department. [62-620.610(14)]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility or activity and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15)]
- 16. The permittee shall apply for a revision to the Department permit in accordance with Rules 62-620.300, F.A.C., and the Department of Environmental Protection Guide to Permitting Wastewater Facilities or Activities Under Chapter 62-620, F.A.C., at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16)]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - Steps being taken to prevent future occurrence of the noncompliance.

[62-620.610(17)]

- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246 and Chapters 62-160, 62-601, and 62-610, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.

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- b. If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
- d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrVIII, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
- e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
- f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220, and 62-160.330, F.A.C.

[62-620.610(18)]

- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19)]
- 20. The permittee shall report to the Department's Northwest District any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph (a)4. that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but no later than 24 hours from the time the permittee becomes aware of the discharge. The permittee, to the extent known, shall provide the following information to the State Warning Point:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (j) Other persons or agencies contacted.

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- (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.1 above, shall be provided to the Department's Northwest District within 24 hours from the time the permittee becomes aware of the circumstances.
- c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Northwest District shall waive the written report.

[62-620.610(20)]

21. The permittee shall report all instances of noncompliance not reported under Permit Conditions VIII. 17, 18 or 19 of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Permit Condition VIII.20 of this permit. [62-620.610(21)]

22. Bypass Provisions.

- a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment works.
- b. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (3) The permittee submitted notices as required under Permit Condition VIII. 22. c. of this permit.
- c. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Permit Condition VIII. 20. of this permit. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- d. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Permit Condition VIII. 22. b.(1) through (3) of this permit.
- e. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Permit Condition VIII. 22. b. through d. of this permit. [62-620.610(22)]

23. Upset Provisions.

- a. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology-based effluent limitations because of factors beyond the reasonable control of the permittee.
 - (1) An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, careless or improper operation.
 - (2) An upset constitutes an affirmative defense to an action brought for noncompliance with technology based permit effluent limitations if the requirements of upset provisions of Rule 62-620.610, F.A.C., are met.
- b. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed contemporaneous operating logs, or other relevant evidence that:
 - (1) An upset occurred and that the permittee can identify the cause(s) of the upset;
 - (2) The permitted facility was at the time being properly operated;
 - (3) The permittee submitted notice of the upset as required in Permit Condition VIII.5. of this permit; and
 - (4) The permittee complied with any remedial measures required under Permit Condition VIII. 5. of this permit.

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c. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.

Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review. [62-620.610(23)]

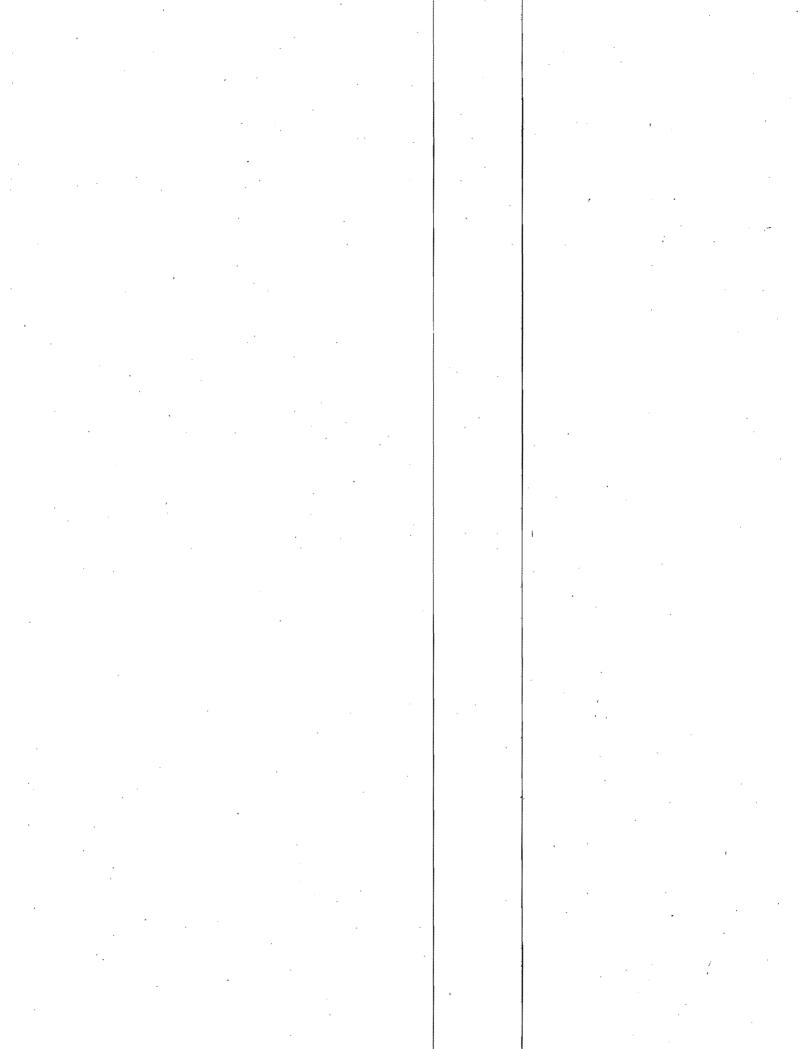
Executed in Pensacola, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

David P. Morres, P.E.

Program Administrator Water Facilities

DATE: May 16, 2012





Governor

Department of Environmental Protection

Northwest District 160 Governmental Center Pensacola, Florida 32502-5794

Colleen M. Castille Secretary

INDUSTRIAL WASTEWATER FACILITY PERMIT

PERMITTEE:

Taminco Methylamines Inc. 1950 Lake Park Drive Smyrna, Georgia, 30080

RESPONSIBLE AUTHORITY:

Mr. Jean-Michel Denis, Vice President

FACILITY CONTACT:

Ms. Reba L. Heath, Senior Environmental Specialist

FACILITY:

Taminco Methylamines Inc., Pace Plant 4575 Highway 90 East Pace, FL. 32571

PERMIT NUMBER:

FILE NO.:

FL0002313-001-IW1S

ISSUANCE DATE:

PRELIMINARY

EXPIRATION DATE:

PRELIMINARY

Es cambia Bay

Santa Rosa County

Latitude: 30° 34' 05" N

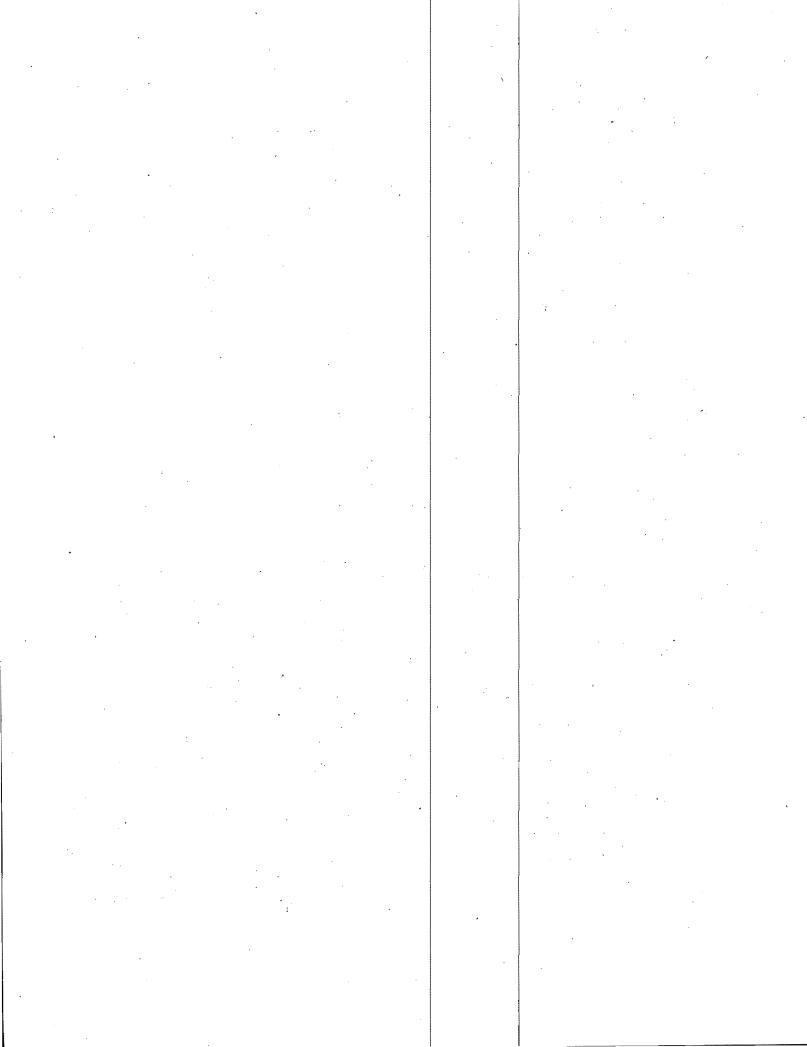
Longitude: 87° 09' 05" W

This permit is issued under the provisions of Chapter 403.088(2)(f) and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. The above named Permittee is hereby authorized to construct and operate the facilities shown on the application and other documents attached hereto, listed in the Fact Sheet, or on file with the Department and made a part hereof and specifically described as follows:

WASTEWATER TREATMENT:

The existing system is a wastewater treatment system for the industrial wastewaters generated by the Pace Plant of TMI. Individual production facilities includes two plants for the production of methylamines, two plants for the production of higher amines and a pilot plant, still operated by Air Products and Chemicals, Inc. (APCI), used for product development. Another facility retained by APCI, a liquid hydrogen terminal, is located on-site with a de minimis discharge associated with the activities at the terminal.

Wastewater treatment includes neutralization of the wastewater, equalization, anaerobic treatment, aerobic treatment and final percolation in the site Rapid Infiltration Basins (RIBs). Facility modifications, completed by the former owner, APCI, reduced the effluent impact on Escambia Bay of nutrients and oxygen depleting substances by eliminating effluent discharge to Escambia Bay except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events. During the last permit term, APCI constructed three (3) additional Rapid Infiltration Basins (RIBs) that substantially increased the disposal capacity of the land application system. APCI, also, shut down the methanol, ammonia, nitric acid and ammonium nitrate plants. The individual plants shutting down resulted in a reduction of process wastewater flow from 0.41 MGD to 0.22 MGD. The total design capacity remains at 1.23 MGD MADF with 1.23 MGD MADF discharging to the percolation pond system and an estimated 0.00 MGD MADF discharging to Escambia Bay. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.



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EFFLUENT DISPOSAL:

Surface Water Discharge:

The point of discharge to Escambia Bay, Class III waters, via Outfall # D001, is located approximately at latitude 30° 34' 05" N, longitude 87° 09' 05" W. There shall be no discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

Underground Injection: Not applicable.

Land Application:

G001, a 1.23 MGD MADF permitted discharge to 7 percolation ponds located approximately at latitude: 30° 34' 47" N,

longitude: 87° 08' 11" W

Reuse: Not

Not applicable.

IN ACCORDANCE WITH: The limitations, monitoring requirements and other conditions set forth in Part I through Part VIII, pages 3 through 17 of this permit.

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Taminco Methylamines Inc. Pace Plant Page 3 PERMIT NUMBER:

FL0002313

FILE No.:

FL0002313-008-IW1S

I. Effluent Limitations and Monitoring Requirements

A. Surface Water Discharges

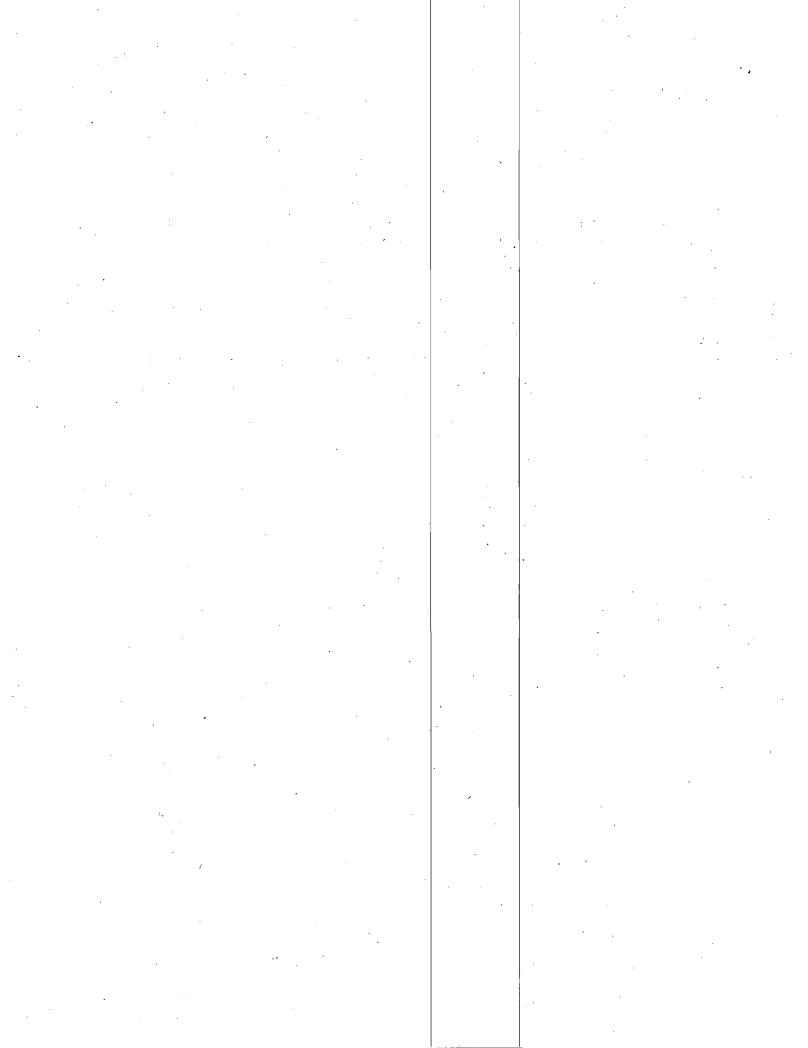
1. The permittee is authorized to discharge from Outfall # D001, process wastewater, cooling tower blowdown, and stormwater runoff from areas associated with industrial activity and ground water. Surface water discharges shall be limited to the amount in excess of the land application system capacity associated with 25 year, 24 hour daily rainfall event or equivalent chronic rainfall events. Such discharge shall be limited and monitored by the permittee as specified below:

Parameters	Effluent Limitations			Moi	nitoring Requirem	ents
· .	Monthly Average	Daily Maximum	Other	Frequency	Sample Type	Sample Location
Flow (MGD)	Report	Report	na	Continuous	Recorder	EFF-1
pH (SU)	na	na	△ 6.5 to 8.5 🐔	Daily	Grab	EFF-1
Total Ammonia (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrate (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrogen, Total (MG/L)	Report	Report		l/week	Grab	EFF-I
Total Phosphorus (MG/L as P)	Report	Report	Report (lbs/day as P)	1/week	Grab	EFF-1
Total Suspended Solids (MG/L)	30	60:	Report (lbs/day)	1/week	Grab	EFF-1
CBOD ₅ , (MG/L)	- 30	v 60-7	Report (lbs/day)	l/week	Grab	EFF-1
Total Recoverable Copper (UG/L)	na	na	Max 3:1/tigh	1/week	Grab	EFF-1
Rainfall (inches)	na	na 🗸	CREPORT V	Daily	24 Hour Total	
Whole Effluent Toxicity			1 See below			
OCPSF 40CFR414 Parameters	11	70001111	Seebelov	N .		

OCPSF 40 FR444 Parameters of the real discharge the permittee shall initiate the series of tests described below to evaluate the compliance with effluent limitations of 40 CFR414 (OCPSF) for the discharge of toxic pollutants from Outfall D001. These tests are required one time per calendar year for all discharge events.

The discharge must not exceed the concentration of the toxic pollutants listed below:

Outfall D001	Discharge Limitations		Monitoring Requirement		ments	
40CFR414 (OCPSF) Limits					•	
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
1,1,1-Trichloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
1,1,2-Trichloroethane	0.0038	0.0097	па	1/year	Grab	EFF-I
1,1-Dichloroethane	0.0039	0.0106	na	1/year	Grab	EFF-1
1,1-Dichloroethylene	0.0029	0.0045	na	1/year	Grab	EFF-1
1,2,4-Trichlorobenzene	0.0122	0.0250	na	1/year	Grab	EFF-1
1,2-Dichlorobenzene	0.0138	0.0292	na	1/year	Grab	EFF-1
1,2-Dichloroethane	0.0122	0.0377	na	1/year	Grab	EFF-1
1,2-Dichloropropane	0.0274	0.0411	na	l/year	Grab	EFF-1
1,2-trans-Dichloroethylene	0.0038	0.0097	na	1/year	Grab	EFF-1
1,3-Dichlorobenzene	0.0055	0.0079	na	1/year	Grab	EFF-1
1,3-Dichloropropylene [1,3-Dichloropropene]	0.0052	0.0079	na	l/year	Grab	EFF-1
1,4-Dichlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
2,4-Dichlorophenol	0.0070	0.0200	na	1/year	Grab	EFF-1
2,4-Dimethylphenol	0.0032	0.0064	na	1/year	Grab	EFF-1



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I.A.1 continued:

Outfall D001	Discharge Limitations		Monitoring Requirements			
40CFR414 (OCPSF) Limits						
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample •Type	Sample Point
2,4-Dinitrophenol	0.0127	0.0220	na	1/year .	Grab	EFF-1
2,4-Dinitrotoluene	0.0202	0.0510	na	1/year	Grab	EFF-1
2,6-Dinitrotoluene	0.0456	0,1147	na	1/year	Grab	EFF-1
2-Chlorophenol	0.0055	0.0175	na	1/уеаг	Grab	EFF-1
2-Nitrophenol	0.0073	0.0123	na	1/year	Grab	EFF-1
3,4-Benzofluoranthene [benzo(b)fluoranthene]	0.0041	0.0109	na	1/year	Grab	EFF-1
4,6-Dinitro-o-Cresol	0.0140	0.0495	na	1/year	Grab	EFF-1
4-Nitrophenol	0.0129	0.0222	na	1/year	Grab	EFF-1
Acenaphthene	0.0039	0.0106	na .	1/уеаг	Grab	EFF-1
Acenaphthylene	wqs	wqs	*0.031 µg/l [#] -;	l/year	Grab	EFF-1
Acrylonitrile	0.0172	0.0433	na 🗸	//year	Grab	EFF-1
Anthracene	0.0039	0.0106	200	1/year	Grab	EFF-1
Benzene	0.0066	[D. p. 243]	1 6a0 1	l/year	Grab	EFF-1
Benzo(a) Anthracene	wgs \	wds	100031 µg/1"	l/year	Grab	EFF-1
Benzo(a) Pyrene	Masel	III luds	*0.031 µg/l#	l/year	Grab	EFF-1
Benzo(k) Fluoranthene	l lygs	wqs	*0.031 μg/l"	1/year	Grab	EFF-1
bis(2-Ethylhexyl)Phthalate	0.0184	0.0499	na	1/year	Grab	EFF-1
Carbon Tetrachloride	0.0032	0.0068	na	1/year	Grab	EFF-1.
Chlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Chloroethane	0.0186	0.0479	na	1/year	Grab	EFF-1
Chloroform	0.0038	0.0082	na ·	1/year	Grab	EFF-1
Chrysene	wqs	wqs	*0.031 µg/l#	1/year	Grab	EFF-1
Di-n-Butyl Phthalate	0.0048	0.0102	na	1/year	Grab	EFF-1
Diethyl Phthalate	0.0145	0.0363	na	1/year	Grab	EFF-1
Dimethyl Phthalate	0.0034	0.0084	na .	1/year	Grab	EFF-1
Ethylbenzene	0.0057	0.0193	na	1/year	Grab	EFF-1
Fluoranthene	0.0045	0.0122	na	1/year	Grab	EFF-1
Fluorene	0.0039	0.0106	na	1/year	Grab	EFF-1
Hexachlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Hexachlorobutadiene	0.0036	0.0088	na	1/year	Grab	EFF-1
Hexachloroethane	0.0038	0.0097	na	l/year	Grab	EFF-1
Methyl Chloride	0.0154	0.0340	па	1/year	Grab	EFF-1
Methylene Chloride	0.0072	0.0159	na	1/year	Grab	EFF-1
Naphthalene	0.0039	0.0106	na	1/year	Grab	EFF-1
Nitrobenzene	0.0048	0.0122	na	1/year	Grab	EFF-1

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I.A.1. continued:

40CFR414 (OCPSF) Limits	D	ischarge Limita	tions	Monitoring Require		ments	
Parameter (units mg/l unless noted)	Monthly Average	Daily Maximum	Other ·	Monitoring Frequency	Sample Type	Sample Point	
Phenanthrene	wqs	wqs	*0.031 µg/l#	l/year	Grab	EFF-1	
Phenol	0.0027	0.0047	na	1/year	Grab	EFF-1	
Pyrene	0.0045	0.0120	na	I/year	Grab	EFF-1	
Tetrachloroethylene	· wqs	wqs	Mx 8.85 µg/l#	1/year	Grab	EFF-1	
Toluene	0.0047	. 0.0143	na	1/year	Grab	EFF-1	
Total Recoverable Cyanide	wqs	wqs	Max 70.0 µg/l	1/year	Grab	EFF-1	
Total Recoverable Chromium	, wqs	wqs	Max 50 μg/l	1/year	Grab	EFF-1	
Tot Rec Copper (UG/L)	wqs	wqs	Max 3.7 ug/l	1/week	Grab	EFF-1	
Total Recoverable Lead	wqs	wqs	Max 8.5 μg/l	1/year	Grab	EFF-1	
Total Recoverable Nickel	wqs	wqs .	Max 8.3 μg/l	- 1/уеа г	Grab	EFF-I	
Total Recoverable Zinc	wqs	wqs	Max 86.0 μg/l	1/year	Grab	EFF-1	
Trichloroethylene [ethene]	0.0038	0.0097	na	1/year	Grab	EFF-1	
Vinyl Chloride	0.0186	0.0479	na	1/year	Grab	EFF-1	

Notes: wqs - Those parameters with the maximum concentrations marked as "wqs" are limited by the more stringent water quality standard as indicated in the "Other" column. [62-302.530(28),(30),(57),(9),(17),(37),(64),(69), FAC]

#- Those parameters with the maximum concentrations marked with a "#" (1100) are those union a 12-month rolling annual average basis. [62-302.530 Note (1), FAC]

* - The limit for those parameters with the max concentrations transfed with a 't' slabbol is the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs) and is limited to < 0.031 µg/l on an annual average basis (Acemphility) and Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi) perylene, Benzo(k) Fluoranthene, Chrysene, Diperzo(a) hinthracene, Indene (1,2,3cd) pyrene, and Phenanthrene. [62-302.530(57) F.A.C.]

2. Effluent samples for Outfall #D001 shall be taken at locations listed in Permit Condition I.A.1. and described below:

Monitoring Location (Sample Point) WAFR Site Number / Old DEP Site ID #	Description of Monitoring Location
EFF-1 / 1566 / 1057X10043	Alpha Pond Parshall Flume Discharge

- 3. If a discharge to Escambia Bay, the permittee shall submit a report to the Department within 30 days following the discharge as specified in section I.E. The report shall include the cause and nature of the discharge, the duration of the discharge, total gallons discharged and corrective measures that were taken. The report shall include rainfall measurement data and calculations to demonstrate that the discharge was due to the rainfall event.
- 4. There shall be no discharge of floating solids or visible foam in such amounts as to form nuisances. [62-302.500(1), FAC]
- 5. The discharge shall not cause a visible sheen defined as iridescence, nor shall be present so as to cause taste or odor, or otherwise interfere with the beneficial use of receiving water. [62-302.530(50)(b), FAC]
- 6. The pH shall be continuously monitored with a recorder during monitoring required by I.A.1.. The pH values shall not deviate outside the range of 6.5 to 8.5 standard units more than 1% of the time in any calendar month and no individual excursion shall exceed 60 minutes. An "excursion" is an unintentional and temporary incident in which the pH value of discharged wastewater exceeds the range set forth in the permit.
- 7. 62-302.530(57)(a), F.A.C. limits the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs): Acenaphthylene, Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi)perylene, Benzo(k) Fluoranthene, Chrysene, Dibenzo(a,h)anthracene, Indeno(1,2,3cd)pyrene, and Phenanthrene to < 0.000031 mg/l on an annual average basis. Due to BPJ as they were in the last permit, the additional PAHs are added to this list to be < 0.000031 mg/l: Anthracene, Fluorene, and Pyrene.
- 8. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.A. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge with the receiving water.

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9. Reopener Clause: The permit may be reopened pursuant to rule 62-620.325, FAC to adjust effluent limitations or monitoring requirements if information received indicates a need for different limitations or monitoring requirements, such as but not limited to results from water quality studies or DEP approved changes in water quality standards.

- 10. Those parameters with the maximum concentrations marked with a "#" symbol are based upon a 12 month rolling annual average basis. [62-302.530 Note (1),FAC]
- 11. For those parameters for which monitoring is required once per month or less frequently than once a month, if the single sample exceeds the monthly average limit, additional samples may be taken to demonstrate compliance with the monthly average limits. Otherwise, the single sample shall be used to calculate the monthly average and daily maximum. If more than one sample is taken in a given month, the monthly average of all samples taken during that month shall be reported.
- B. Underground Injection Control Systems Not applicable

C. Land Application Systems

1. The Discharge from Land Application System <u>G-001</u> shall be limited and monitored by the Applicant as specified below at the monitoring point related to the discharge location to the percolation pond system in use at the time of sampling which could be EFF-3 or EFF-4:

G-001 (WAFR 37240)	Discharge Limitations		Monitoring Requirements			
Parameters (units)	Mo Avg.	Daily Max.	Other -specify	Frequency	Sample Type	Sam Pnt
2,4-Dinitrotoluene, (µg/l)	na .	** Report	na M	l/month	24 hour composite	EFF-3, 4
2,6-Dinitrotoluene, (µg/l)	na	** Report	PES 11 CV	l/month	24 hour composite	EFF-3, 4
CBOD ₅ , (mg/l)	па ПЕ	Report	14071 S	l/month	24 hour composite	EFF-3, 4
Chemical Oxygen Dem; COD, (mgT)	Mall	Renort 1	na	1/month	24 hour composite	EFF-3, 4
Flow, (MGD)	Report	Report	na	Continuous	Recorder	EFF-3, 4
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Organic Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4
pH, (standard units)	na	na	Report min & max	5/week	Grab	EFF-3, 4
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Dissolved Solids TDS, mg/l	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Tot. Kjeldahl Nitr. TKN, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4 1
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	24 hour composite	EFF-3, 4
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	24 hour composite	EFF-3, 4

- ** Consent Order No. 94-1833 sets a technology based goal at 0.2 and 0.1 micrograms per liter (µg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. This permit does not alter the substantive or procedural requirements of Consent Order No. 94-1833.
- 2. Unless specified elsewhere in the permit, samples taken in compliance with the monitoring requirements specified in I.C.1. shall be taken at the nearest accessible point after final treatment but prior to the actual discharge to the land application system.
- 3. Effluent samples for disposal system # G001 shall be taken at the monitoring site locations listed in Permit Condition I.C.1. described below:

Monitoring Location (Sample Point) / WAFR Site Number	Description of Monitoring Location
EFF-3 / 1565	Bravo Pond discharge to percolation ponds
EFF-4 / 37239	Echo Pond discharge to percolation ponds

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D. Other Methods of Disposal or Recycling

1. There will also be incidental seepage to groundwater within the zone of discharge from the wastewater treatment ponds and from temporary flooding onto the ground around sewers during extreme rain events.

2. There shall be no discharge of industrial wastewater from this facility to ground water or surface waters, except as authorized by this permit.

E. Other Limitations and Monitoring and Reporting Requirements

- 1. The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" dated June 21, 1996, is available from the Department on request. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this permit. Any method included in the list may be used for reporting as long as it meets the following requirements:
 - a) The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;
 - b) The laboratory reported PQL for the specific parameter is less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the permit shall use methods that provide a PQL, which is equal to or less than the applicable water quality criteria stated in 62-302 FAC; and
 - If the PQLs for all methods available in the approved list and above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest state IPQL shall be used.

Where the analytical results are below method detection or practical quantification limits, the permittee shall report in accordance Rule 62-4.246(6)(c)(d), F.A.C., and the instructions on the applicable discharge monitoring report. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. However, where necessary, the permittee may request approval for alternative methods or for alternative MDLs and PQLs for any approved analytical method, in accordance with the criteria of Rules 62-160.520 and 62-160.530, F.A.C. [62-4.246, 12-15-98] [62-160.520 and .530, 10-15-96]

2. Monitoring results obtained for each calendar month shall be summarized for that month and reported on a Discharge Monitoring Report (DMR), Form 62-620.910(10), postmarked no later than the 28th day of the month following the completed calendar month For example, data for January shall be submitted by February 28. Signed copies of the DMR shall be submitted to the address specified below:

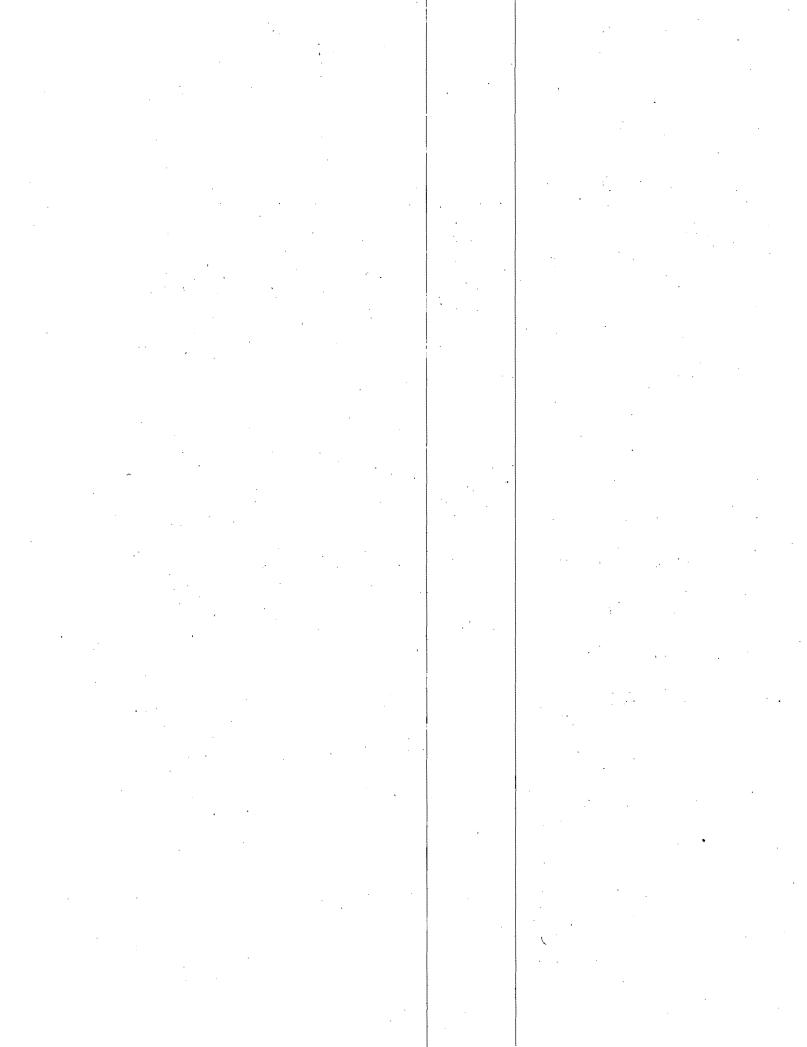
Florida Department of Environmental Protection Wastewater Facilities Regulation Section, Mail Station 3550 Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

If no discharge occurs during the reporting period, sampling requirements of this permit do not apply. The statement "No discharge" shall be written on the DMR form. If, during the term period of this permit, the facility ceases to discharge, the Department shall be notified immediately upon cessation of discharge. Such notification shall be in writing.

3. Unless specified otherwise in this permit, all other reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to, as appropriate, the Northwest District Office of the Department at the address specified below:

Florida Department of Environmental Protection Northwest District Office 160 Governmental Center Pensacola, FL 32502-5794

4. The permittee shall provide safe access points for obtaining representative samples, which are required by this permit.



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- 5. The permittee shall ensure that all laboratory analytical data submitted to the department as required by this permit is from a laboratory which has a currently valid and Department-approved Comprehensive Quality Assurance Plan (CompQAP) [or a CompQAP pending approval] for all parameters being reported as required by Chapter 62-160, Florida Administrative Code.
- 6. If there is no discharge from the facility on a day scheduled for sampling, the sample shall be collected on the day of the next discharge.
- 7. Any bypass of the treatment facility which is not included in the monitoring specified I.A.1, I. B.1., I.C.1., or I.D., is to be monitored for flow and all other required parameters. For parameters other than flow, at least one grab sample per day shall be monitored. Daily flow shall be monitored or estimated, as appropriate, to obtain reasonable data. All monitoring results shall be reported on the appropriate DMR.

F. Whole Effluent Toxicity Testing

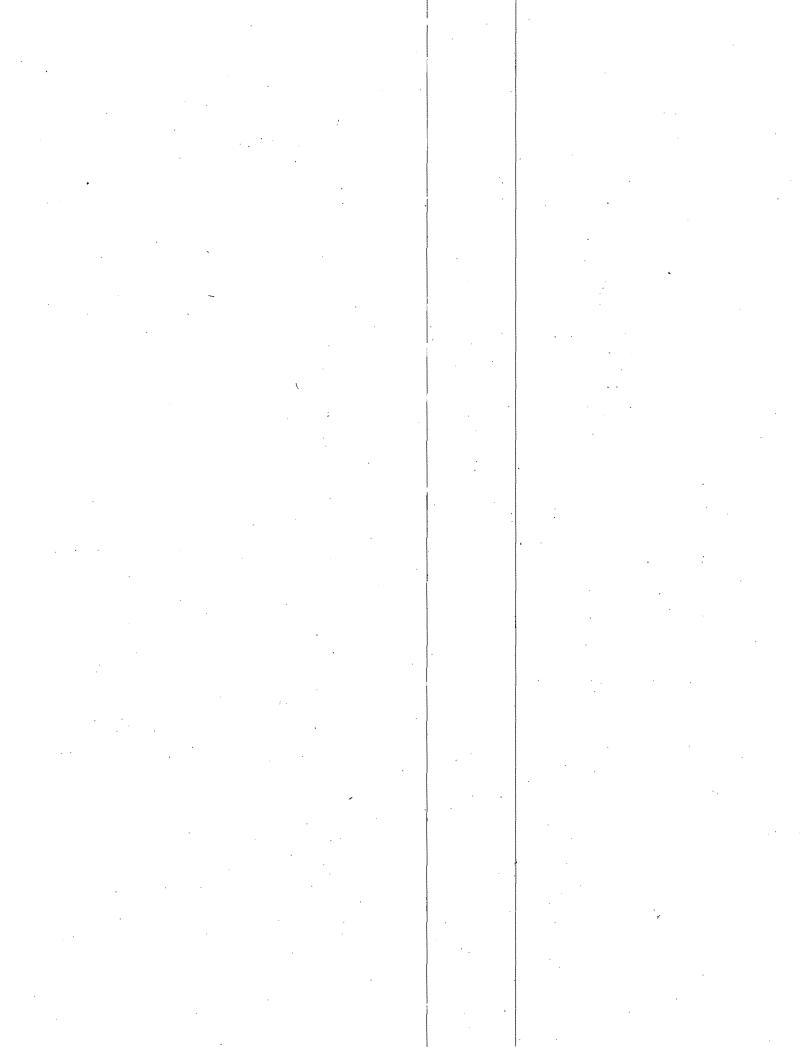
1. The permittee shall comply with the following requirements to evaluate acute whole effluent toxicity of the discharge from outfall #D001.

a. Effluent limitation

- (1) Mortality of less than or equal to 20% in the 100% effluent concentration in any "routine" test shall constitute compliance with these permit conditions and Rule 62-302.200(1) and Rule 62-302.500(1)(a)4, F.A.C. Mortality of greater than 20% in the 100% effluent concentration in any test shall constitute unacceptable toxicity. The permittee shall conduct "additional follow-up" tests as described in 1.c. below for any "routine" test for which unacceptable toxicity has been observed.
- (2) Whole effluent acute toxicity shall not exceed in any routine test mortality of greater than 50% in the 100% effluent concentration or in any additional follow-up test intuitie 62-302.500(1)) Rule 62-302.500(1)(a)4 and Rule 62-4.244(3)(a), F.A.C.1
- b. Monitoring frequency
 - (1) "Routine" toxicity tests shall be confibered once every three months, the first starting within 60 days of permit issuance, and lasting for the duration of this permit unless a reduction in the frequency of monitoring is granted in writing by the Department.
 - (2) Upon completion of six consecutive, valid "routine" tests that demonstrate compliance with the effluent limitation specified in 1.a. (1) and (2) above the permittee may submit a written request to the Department for a reduction in monitoring. The Department shall review this request within 45 days of receipt and approve or deny the request in writing. Materials submitted to the Department for review should include a summary of the data and the complete bioassay reports for all tests being considered. In no case shall the frequency of monitoring be reduced to less than annually. Requested reductions in monitoring frequency shall only become effective upon Department approval.
 - (3) If a test within the sequence of the six is deemed invalid, but is replaced by a repeat valid test initiated within seven days of the invalidation, the invalid test will not be counted against the requirement for six consecutive valid tests for the purpose of evaluating the reduction of monitoring frequency. If two or more invalidations occur, this provision does not apply.

c. Test Requirements

- (1) Routine Tests: All routine tests shall be conducted using a control (0% effluent) and one test concentration of 100% final effluent.
- (2) Additional Follow-up Tests, if required:
 - (a) If a routine test does not meet the acute toxicity limitation in 1.a.(1) and (2) above, the permittee shall conduct three additional follow-up tests on each species that failed the test.
 - (b) The first additional follow-up test shall be conducted using a control (0% effluent) and a minimum of five dilutions: 100%, 50%, 25%, 12.5% and 6.25% effluent. The dilution series may be modified in the second and third test to more accurately bracket the toxicity, such that at least two dilutions above (not to exceed 100% effluent) and two dilutions below the target concentration and a control (0% effluent) are run. All test results shall be statistically analyzed according to the Appendices in EPA-821-R-02-012.
 - (c) The first test shall be initiated within two weeks of the end of the failed routine test. The remaining additional follow-up tests shall be conducted weekly thereafter until a total of three valid additional follow-up tests are completed.



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(3) The permittee shall conduct 96-hour acute static renewal toxicity tests using the daphnid, Ceriodaphnia dubia, and the bannerfin shiner, Cyprinella leedsi, concurrently.

- (4) All test species, procedures and quality assurance criteria used shall be in accordance with Methods for Measuring

 Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms, EPA-821-R-02-012. Any
 deviation of the bioassay procedures outlined herein shall be submitted in writing to the Department for review and
 approval prior to use. In the event the above method is revised, the permittee shall conduct acute toxicity testing in
 accordance with the revised method.
- (5) The control water and dilution water used will be moderately hard water as described in EPA-821-R-02-012, Table 7.

d. Sampling Requirements

- (1) Routine tests shall be conducted on a single grab sample of final effluent. If the duration of the discharge is less than 24-hours, the duration of discharge shall be documented on the chain of custody.
- (2) For additional follow-up tests, the first test shall be conducted on four separate grab samples collected at evenly-spaced (6-hr) intervals over a 24-hour period. Each sample shall be run as a separate test. The second and third additional follow-up tests shall be run on a single grab sample collected on the day and time when the greatest toxicity was identified in the first additional follow-up test. Results for each additional test shall include the determination of LC50 values with 95% confidence limits.

e. Quality Assurance Requirements

(1) A standard reference toxicant (SRT) quality assurance (QA) acute toxicity test shall be conducted with each species used in the required toxicity tests either concurrently or started no more than 30 days before the date of each routine or additional follow-up test conducted. The SRT-QA data shall be submitted with each companion routine or additional follow-up test required.

(2) If the mortality in the control (0% effluent) exceeds 10% for either species in any test, the test for that species (including the control) shall invalidated and the test repeated 10% for either species in any test, the test for that species (including

(3) If during any routine separate grad sample less 1100% mortality occurs prior to the end of the test and control mortality is less than 10% at that find that test findluding the control) shall be terminated with the conclusion that the test fails and constitutes non-compliance.

(4) Additional follow-up tests shall be evaluated for acceptability based on the concentration-response relationship, as required by EPA-821-R-02-012, Section 12.2.6.2. and included with the submitted bioassay reports.

f. Reporting Requirements

- (1) Results from all required tests shall be reported on the Discharge Monitoring Report (DMR) as follows:
 - (a) Routine Test Results: If 50% or less morality occurs in all four separate grab sample tests for the test species, ">100%" should be entered on the DMR for that test species. If greater than 50% mortality occurs in any of the four separate grab sample tests for the test species, "<100%" should be entered.
 - (b) Additional Follow-up Test Results: Report the calculated LC50 value for that test species and the 95% confidence limits.
- (2) A bioassay laboratory report for the routine test shall be prepared according to EPA-821-R-02-012, Section 12, Report Preparation and Test Review and mailed to the Department at the address below within 30 days of the completion of the test.
- (3) For additional follow-up tests, a single bioassay laboratory report shall be prepared according to EPA-821-R-02-012, Section 12, and mailed within 45 days of completion of the third valid additional follow-up test. If any additional follow-up test, or two consecutive routine tests, does not meet either the 20% or 50% effluent limitation specified in 1.a. (1) and (2) above, the permittee shall contact the Department within 30 days of the laboratory report submittal to discuss the corrective actions necessary to remedy the observed acute toxicity.
- (4) All bioassay laboratory reports shall be sent to:

Florida Department of Environmental Protection Northwest District Office, Water Facilities Government Center Pensacola, FL 32502

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Industrial Sludge Management Requirements

Basic Management Requirements

- 1. The method of disposal for sludge or residuals generated by the treatment of industrial wastewaters by this facility is to a Class I solid waste landfill.
- 2. Disposal of sludge in a solid waste management facility permitted by the Department shall be in accordance with the requirements of Chapter 62-701, F.A.C.
- The permittee shall keep records of the amount of sludge or residuals disposed, transported, or incinerated in dry tons/day. If a 3. person other than the permittee is responsible for sludge transporting, disposal, or incineration, the permittee shall also keep the following records:
 - name. address and telephone number of any transporter, and any manifests or bill of lading used.
 - name and location of the site of disposal, treatment, or incineration
 - name, address, and telephone number of the entity responsible for the disposal, treatment, or incineration site.

III. Groundwater Monitoring Requirements

- During the period of operation authorized by this permit, the permittee shall sample ground water in accordance with this permit and the approved ground water monitoring plan prepared under Rule 62-522.600, F.A.C.
- 2. The following monitoring wells are included in the ground water monitoring plan for the Plant A and Plant B wastewater treatment pond areas.

Well Name	Old ID	WAFR No.	Depth	·Aquifer	Well Type	New/Existing
Plant Area A Monitoring Wells V						
MWB-A1	A-1	1578	200	Surficial)	Background	. Existing
MWI-A2	A-2	157	[mall	Startische)	Intermediate	Existing
MWC-A3	A-3 D)[三萬三	11991	Surficial	Compliance	Existing
Plant Area B Monitoring Wells						
MWB-1	na —	46352		Surficial - Shallow	Background	Existing
MWB-PW5	PW-5	46353	265	Surficial - Deep	Background	Existing
\MWI-B1	B-1	1575	100	Surficial - Shallow	Intermediate	Existing
MWI-B5	B-5	1568	55	Surficial - Shallow	Intermediate	Existing
MWI-E5	· E-5	1570	48	Surficial - Shallow	Intermediate	Existing
MWI-PW7	PW-7	46354		Surficial - Deep	Intermediate	Existing ,
MWP-IT17	MWI-IT17	46356	86	Surficial - Shallow	Piezometer	Existing
MWI-E1(S)	E-1(S)	46359	48	Surficial - Shallow	Intermediate	Existing
MWI-E2(S)	E-2(S)	. 46360	42	Surficial - Shallow	Intermediate	Existing
MWI-E6(S)	E-6(S)	46361	37	Surficial - Shallow	Intermediate	Existing
MWC-B4	B-4	1569	25	Surficial - Shallow	Compliance	Existing
MWC-E3	E-3	1572	35	Surficial - Shallow	Compliance	Existing
MWP-PZ10	MWC-PZ10	46355	143	Surficial - Deep	Piezometer	Existing
MWP-IT20	MWC-IT20	46357	35	Surficial - Shallow	Piezometer	Existing
MWC-2	na	46358		Surficial - Deep	Compliance	Existing
MWC-303	SW-303	48229	150	Surficial - Deep	Compliance	Existing
MWI-17R		48227		Surficial - Shallow	Intermediate	Existing
MWC-20R		48228		Surficial - Shallow	Compliance	Existing

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3. A zone of discharge is established for the Plant A and Plant B wastewater treatment pond areas, more specifically described as follows:

The zone of discharge for Plant A wastewater treatment pond areas shall be 1,000 feet in the direction of groundwater flow and 500 feet in other directions.

The zone of discharge for Plant B wastewater treatment pond areas and the percolation pond shall be the shoreline in the direction of groundwater flow as monitored by a compliance well and 500 feet in other directions or the facilities property boundary whichever is less as monitored by a compliance well.

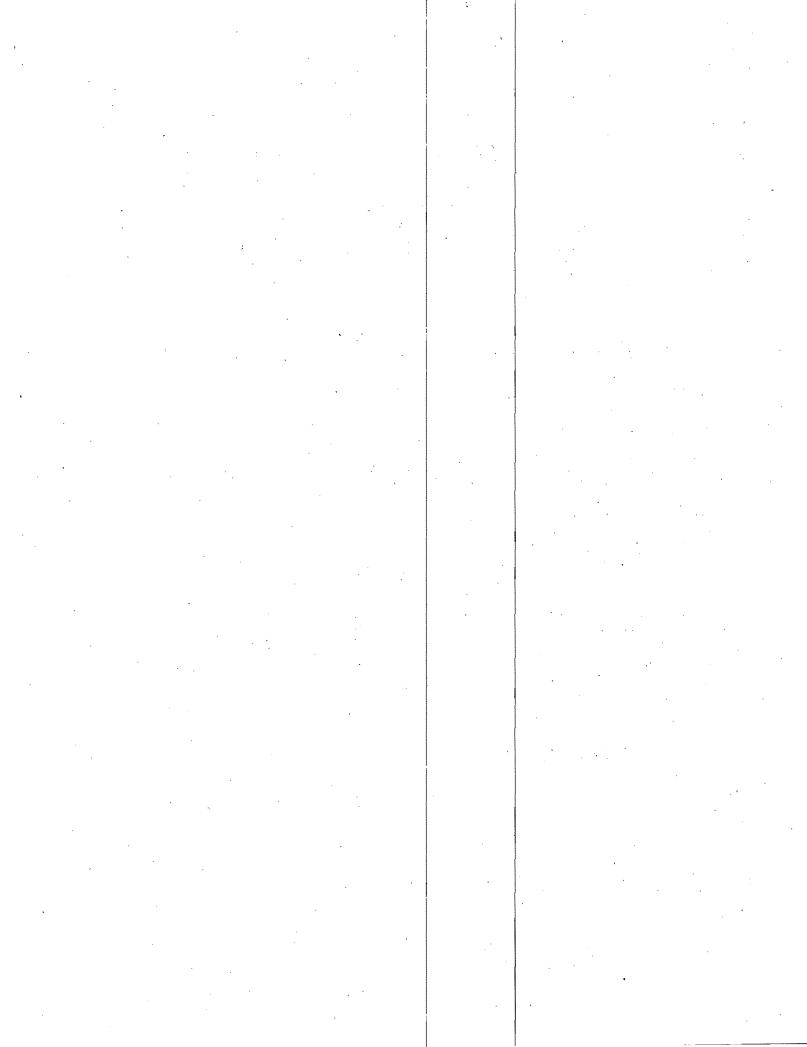
[62-520.200(23), 62-522.400, and 62-522.410]

4. The wells included in the ground water monitoring plan shall be sampled for the parameters, and at the frequencies listed below:

Parameters (units)	Monitoring Requirements					
	Compliance Well Limits ¹	Frequency	Sample Type			
2,4-Dinitrotoluene, (µg/l)	** Report	Quarterly	Grab			
2,6-Dinitrotoluene, (µg/l)	** Report	Quarterly	Grab			
Nitrate - Nitrite, (mg/l as N)	10.0 mg/l	Quarterly	Grab			
Organic Nitrogen, (mg/l as N)	Report	Quarterly	Grab			
pH (standard units)	Report 700	Quarterly	Field			
Sodium (mg/l)		Quarterly	Grab			
Specific conductance (µmhos/cm)	11/1/1/Whoman	Quarterly	Field			
Temperature (degrees C)	A Report	Quarterly	Field			
Total Ammonia, (mg/l as N)	Report	Quarterly	Grab			
Total Dissolved Solids (TDS)(mg/l)	Report	Quarterly	Grab			
Total Kjeldahl Nitrogen, TKN, (mg/l as N)	Report	Quarterly	Grab			
Total Nitrogen, (mg/l as N)	Report	Quarterly	Grab			
Total Organic Carbon, (mg/l)	Report	Quarterly	Grab			
Total Phosphorus, (mg/l as P)	Report	Quarterly	Grab			
Turbidity (NTUs)	Report	Quarterly	Field			
VOC, (µg/l)	Report any detected	Quarterly	Grab			
Trichloroethene, (µg/l)	3 μg/l	Quarterly	Grab			
1,2-Dichloroethane, (µg/l)	3 μg/Ĭ	Quarterly	Grab			
cis-1,2-Dichloroethene, (µg/l)	70 μg/l	Quarterly	Grab			
Water level (MSL)	Report	Quarterly	In-situ (see III.5.)			

¹ Compliance with Part III.4. and IV.1. of this permit is not required for the Plant Area B wells during the active term of Consent Order No. 94-1833 for compliance wells or the zone of discharge subject to the requirements of Consent Order No. 94-1833.

- ** Consent Order No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (µg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. This permit does not alter substantive or procedural requirements of Consent Order No. 94-1833.
- 5. Water levels shall be recorded prior to evacuating the well for sample collection. Measurements, referenced to mean sea level, shall include the top of the well casing, depth to ground water, and the calculated ground water elevation at a precision of plus or minus 0.01 feet.
- 6. Ground water monitoring wells shall be evacuated or purged prior to sampling to obtain a representative sample. All sampling procedures shall be in accordance with the DEP standard operating procedures for the collection of ground water samples.



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- Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions.
- 8. If a monitoring well becomes damaged or cannot be sampled for some reason, the permittee shall notify the Department with a written report within seven days detailing the circumstances and remedial measures taken or proposed. Replacement of monitoring wells shall be approved in advance by the Department.
- 9. Ground water monitoring test results shall be submitted on attached form Groundwater Monitoring Report Part D and shall be submitted in conjunction with the DMR in accordance with condition I. E.2.

IV. Other Land Application Requirements

- 1. The permittee's discharge to ground water shall not cause a violation of water quality standards for Class G-II ground waters at the boundary of the zone of discharge in accordance with rules 62-520.400 and 62-520.420, 62-520.520(1), F.A.C.. This facility has "existing installation" status and is exempt from compliance with secondary drinking water standards.
- 2. The permittee's discharge to ground water shall not cause a violation of the minimum criteria for ground water specified in rule 62-520.400, F.A.C., within the zone of discharge.

V. Operation and Maintenance Requirements

A. Operation of Treatment and Disposal Facilities

- 1. The permittee shall ensure that the operation of this facility is as described in the application and supporting documents.
- 2. The operation of the pollution control facilities described in this permit shall be under the full time supervision of a person who is qualified by formal training and/or practical experience in the field of water pollution control.
- 3. The permittee shall notify the Department in writing within seven days after there is a discharge via outfall D001 on account of 25 year, 24 hours storm events or equivalent campid rainfall events that exceed the capacity of the land application system. Such notices shall include rainfall measurement that provide calculations to demonstrate that the discharge was due to the rainfall event and estimate the expected duration of the surface water discharge. Thereafter, the permittee shall update the Department at least once every two weeks concerning the status of the discharge and any revised estimations of its duration.

B. Record keeping Requirements:

The permittee shall maintain the following records on the site of the permitted facility and make them available for inspection:

- Records of all compliance monitoring information, including all calibration and maintenance records and all original strip chart
 recordings for continuous monitoring instrumentation, including, if applicable, a copy of the laboratory certification showing the
 certification number of the laboratory, for at least three years from the date the sample or measurement was taken;
- 2. Copies of all reports, other than those required in items 1. and 6. of this section, required by the permit for at least three years from the date the report was prepared, unless otherwise specified by Department rule;
- 3. Records of all data, including reports and documents used to complete the application for the permit for at least three years from the date the application was filed, unless otherwise specified by Department rule;
- 4. A copy of the current permit;
- 5. A copy of any required record drawings;
- 6. Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date on the logs or schedule.

VI. Schedules

1. The permittee shall achieve compliance with the other conditions of this permit as follows:

Operational level attained

Issuance Date of permit

2. No later than 14 calendar days following a date identified in the above schedule(s) of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by an identified date, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next scheduled requirement.

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Other Specific Conditions VII.

A. Specific Conditions Applicable to All Permits

- Drawings, plans, documents or specifications submitted by the permittee, not attached hereto, but retained on file at the Northwest District Office, are made a part hereof.
- Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) F.S., applicable portions of reports to be submitted under this permit, shall be signed and sealed by the professional(s) who prepared them.
- 3. This permit satisfies Industrial Wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by local, state or federal agencies.
- The permittee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater or sludge. The permittee shall immediately implement measures appropriate to control the entry of contaminants, and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.

Specific Conditions Related to Construction

- Within thirty days of completion of construction, the permittee shall submit to the Department a completed "Certification of Completion of Construction" (DEP Form 62-620.910(12)) signed and sealed by the engineer of record or other engineer registered in the state of Florida.
- Record drawings shall be prepared and made available in accordance with Rule 62-620.410(6), F.A.C., and the Department of Environmental Protection Guide to Wastewater Permitting within six months of placing the facilities into operation.

Duty to Reapply

The permittee shall apply for renewal of this permit at least 180 days barpie the expiration date of the permit using the appropriate forms listed in Rule 62-620.910, F.A.C., including submittal of the appropriate processing fee set forth in Rule 62-4.050, F.A.C. The existing permit shall not expire until the Department has laken final action on the application renewal in accordance with the provisions of 62-620.335(3) and (4), F. A.O.

Specific Conditions Related to Existing Mahufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe:
 - a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels

(1) One hundred micrograms per liter,

- Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2.4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
- (3) Five times the maximum concentration value reported for that pollutant in the permit application.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels

(1) Five hundred micrograms per liter,

- One milligram per liter for antimony, or
- (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

Reopener Clause

- The permit shall be revised, or alternatively, revoked and reissued in accordance with the provisions contained in Rules 62-620.325 and 62-620.345, F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act (the Act), as amended, if the effluent standards, limitations, or water quality standards so issued or approved:
 - a. Contains different conditions or is otherwise more stringent than any condition in the permit/or;
 - b. Controls any pollutant not addressed in the permit.

The permit as revised or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

- The permit may be reopened to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement.
- The Department may develop a Total Maximum Daily Load (TMDL) during the life of the permit. Once a TMDL has been established and adopted by rule, the Department shall revise this permit to incorporate the final findings of the TMDL.



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VIII. General Conditions

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit are binding and enforceable pursuant to Chapter 403, F.S. Any permit noncompliance constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. [62-620.610(1), F.A.C.]

- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications or conditions of this permit constitutes grounds for revocation and enforcement action by the Department. [62-620.610(2), F.A.C.]
- 3. As provided in subsection 403.087(7), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor authorize any infringements of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit or authorization that may be required for other aspects of the total project which are not addressed in this permit. [62-620.610(3), F.A.C.]
- 4. This permit conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title. [62-620.610(4), F.A.C.]
- 5. This permit does not relieve the permittee from liability and penalties for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted squrce; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to maintain the property of prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permitted in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. [62-620.610(5), F.A.C.]
- 6. If the permittee wishes to continue an activity regulated by this permit after its expiration date, the permittee shall apply for and obtain a new permit. [62-620.6]0(6), F.A.C.]
- 7. The permittee shall at all times properly operate and maintain the facility and systems of treatment and control, and related appurtenances, that are installed and used by the permittee to achieve compliance with the conditions of this permit. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to maintain or achieve compliance with the conditions of the permit. [62-620.610(7), F.A.C.]
- 8. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition. [62-620.610(8), F.A.C.]
- 9. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to
 - a. Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under the conditions of this permit;
 - b. Have access to and copy any records that shall be kept under the conditions of this permit;
 - c. Inspect the facilities, equipment, practices, or operations regulated or required under this permit; and
 - d. Sample or monitor any substances or parameters at any location necessary to assure compliance with this permit or Department rules.

[62-620.610(9), F.A.C.]

10. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by Section 403.111, Florida Statutes, or Rule 62-620.302, F.A.C. Such evidence shall only be used to the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules. [62-620.610(10), F.A.C.]

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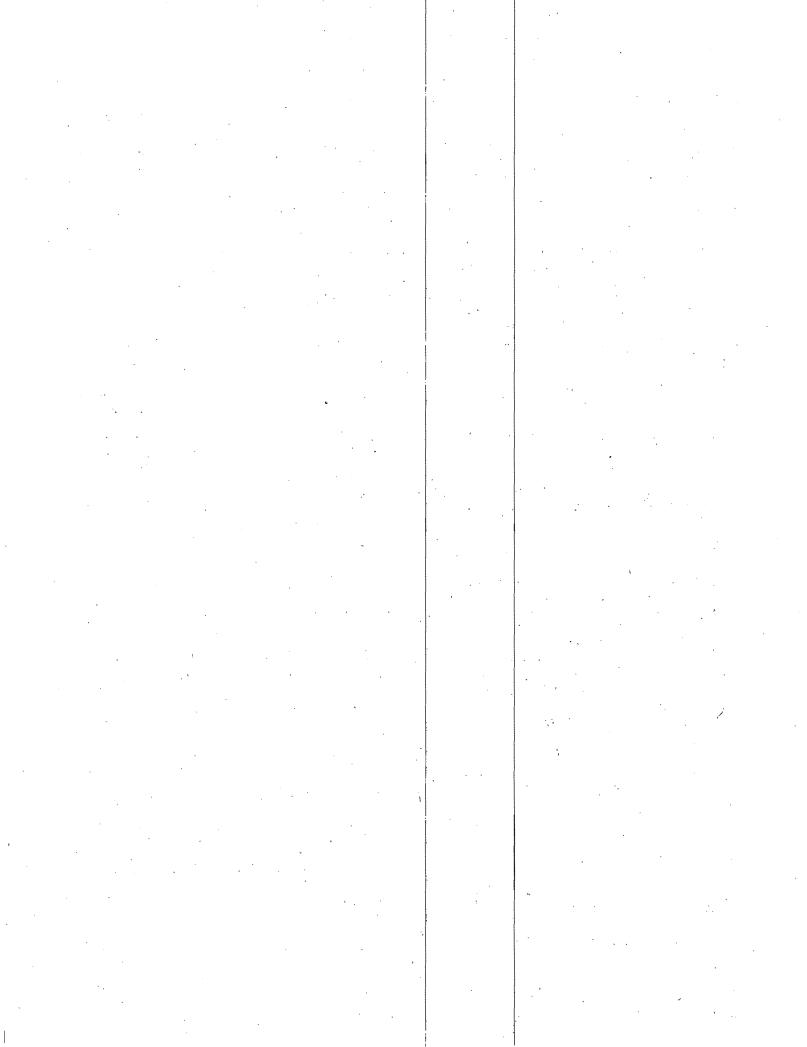
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- 11. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating this permit, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by this permit to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department. [62-620.610(11), F.A.C.]
- 12. Unless specifically stated otherwise in Department rules, the permittee, in accepting this permit, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard. [62-620.610(12), F.A.C.]
- 13. The permittee, in accepting this permit, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C. [62-620.610(13), F.A.C.]
- 14. This permit is transferable only upon Department approval in accordance with Rule 62-620.340, F.A.C. The permittee shall be liable for any noncompliance of the permitted activity until the Department approves the transfer. [62-620.610(14), F.A.C.]
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment. [62-620.610(15), F.A.C.]
- 16. The permittee shall apply for a revision to the permittee permitting at least 90 days before construction of any planned substantial modifications to the permittee facility is to commence or with Rule 62-620.325(2), F.A.C., for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in Rule 62-620.300, F.A.C. [62-620.610(16), F.A.C.]
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of this permit. The notice shall include the following information:
 - a. A description of the anticipated noncompliance;
 - b. The period of the anticipated noncompliance, including dates and times; and
 - c. Steps being taken to prevent future occurrence of the noncompliance. [62-620.610(17), F.A.C.]
- 18. Sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
 - a. Monitoring results shall be reported at the intervals specified elsewhere in this permit and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10), or as specified elsewhere in the permit.
 - b. If the permittee monitors any contaminate more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - c. Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in this permit.
 - d. Except as specifically provided in Rule 62-160.300, F.A.C., any laboratory test required by this permit shall be performed by a laboratory that has been certified by the Department of Health Environmental Laboratory Certification Program (DOH ELCP). Such certification shall be for the matrix, test method and analyte(s) being measured to comply with this permit. For domestic wastewater facilities, testing for parameters listed in Rule 62-160.300(4), F.A.C., shall be conducted under the direction of a certified operator.
 - e. Field activities including on-site tests and sample collection shall follow the applicable standard operating procedures described in DEP-SOP-001/01 adopted by reference in Chapter 62-160, F.A.C.
 - f. Alternate field procedures and laboratory methods may be used where they have been approved in accordance with Rules 62-160.220 and 62-160.330, F.A.C. [62-620.610(18), F.A.C.]



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- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in this permit shall be submitted no later than 14 days following each schedule date. [62-620.610(19), F.A.C.]
- 20. The permittee shall report to the Department's Northwest District Office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain: a description of the noncompliance and its cause; the period of noncompliance including exact dates and time, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.
 - a. The following shall be included as information which must be reported within 24 hours under this condition:
 - (1) Any unanticipated bypass which causes any reclaimed water or effluent to exceed any permit limitation or results in an unpermitted discharge,
 - (2) Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,
 - (3) Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice, and
 - (4) Any unauthorized discharge to surface or ground waters.
 - b. Oral reports as required by this subsection shall be provided as follows:
 - (1) For unauthorized releases or spills of untreated or treated wastewater reported pursuant to subparagraph a.(4) that are in excess of 1,000 gallons per incident, or where interpreted in dictates that public health or the environment will be endangered, oral reports shall be provided to the Department of calling the STATE WARNING POINT TOLL FREE NUMBER (800) 320-0519, as soon as practical, but he later than 24 hours from the time the permittee becomes aware of the discharge. The permittee location is a soon as practical, but he later than 24 hours from the time the permittee becomes aware of the discharge. The permittee location is a soon as practical, but he discharge information to the State Warning Point:
 - (a) Name, address, and telephone number of person reporting;
 - (b) Name, address, and telephone number of permittee or responsible person for the discharge;
 - (c) Date and time of the discharge and status of discharge (ongoing or ceased);
 - (d) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater);
 - (e) Estimated amount of the discharge;
 - (f) Location or address of the discharge;
 - (g) Source and cause of the discharge;
 - (h) Whether the discharge was contained on-site, and cleanup actions taken to date;
 - (i) Description of area affected by the discharge, including name of water body affected, if any; and
 - (i) Other persons or agencies contacted.
 - (2) Oral reports, not otherwise required to be provided pursuant to subparagraph b.(1) above, shall be provided to Department's Northwest District Office within 24 hours from the time the permittee becomes aware of the circumstances.
 - c. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department's Northwest District Office shall waive the written report. [62-620.610(20), F.A.C.]
- 21. The permittee shall report all instances of noncompliance not reported under Conditions VIII.17., 18. and 19. of this permit at the time monitoring reports are submitted. This report shall contain the same information required by Condition VIII.20. of this permit. [62-620.610(21), F.A.C.]

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Taminco Methylamines Inc.

Pace Plant

Page 17

PERMIT NUMBER:

FILE No.:

FL0002313

FL0002313-008-IW1S

22. Bypass Provisions.

- a. Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless the permittee affirmatively demonstrates that:
 - (1) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and
 - (2) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance; and
 - (3) The permittee submitted notices as required under Condition VIII.22.b. of this permit.
- b. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Condition VIII.20. of this permit. A notice shall include a description of the bypass and its cause: the period of the bypass, including exact dates and times: if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.
- c. The Department shall approve an anticipated bypass, after considering its adverse effect, if the permittee demonstrates that it will meet the three conditions listed in Condition VIII.22 a.(1) through (3) of this permit.
- d. A permittee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition VIII.22.a. through c. of this permit. [62-620.610(22), F.A.C.]

23. Upset Provisions

a. A permittee who wishes to establish the affirmative de demonstrate, through properly signed contemporaneous operating logs, or other reflevant evillendeltha

An upset occurred and that the permittee can identify the cause(s) of the upset;
 The permitted facility was at the time being properly operated;
 The permittee submittee notice of the upset as required in Condition VIII.20. of this permit; and

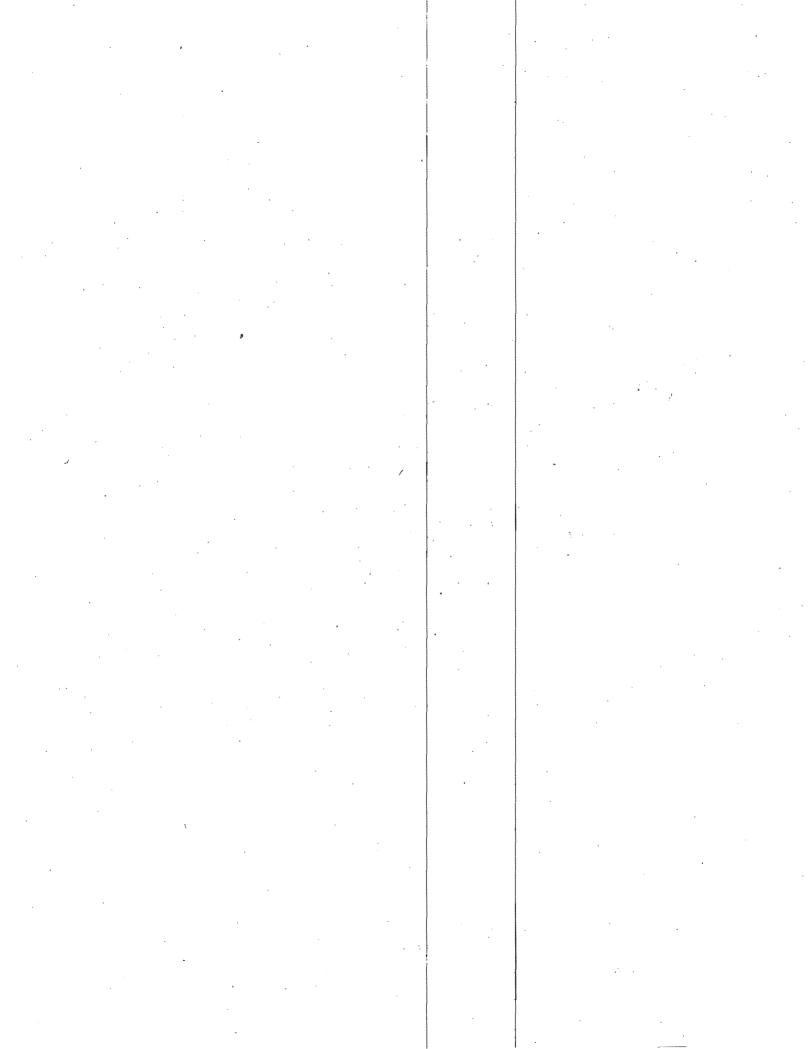
(4) The permittee compiled with any remedial measures required under Condition VIII.5. of this permit.

- b. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the permittee.
- c. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review. [62-620.610(23), F.A.C.]

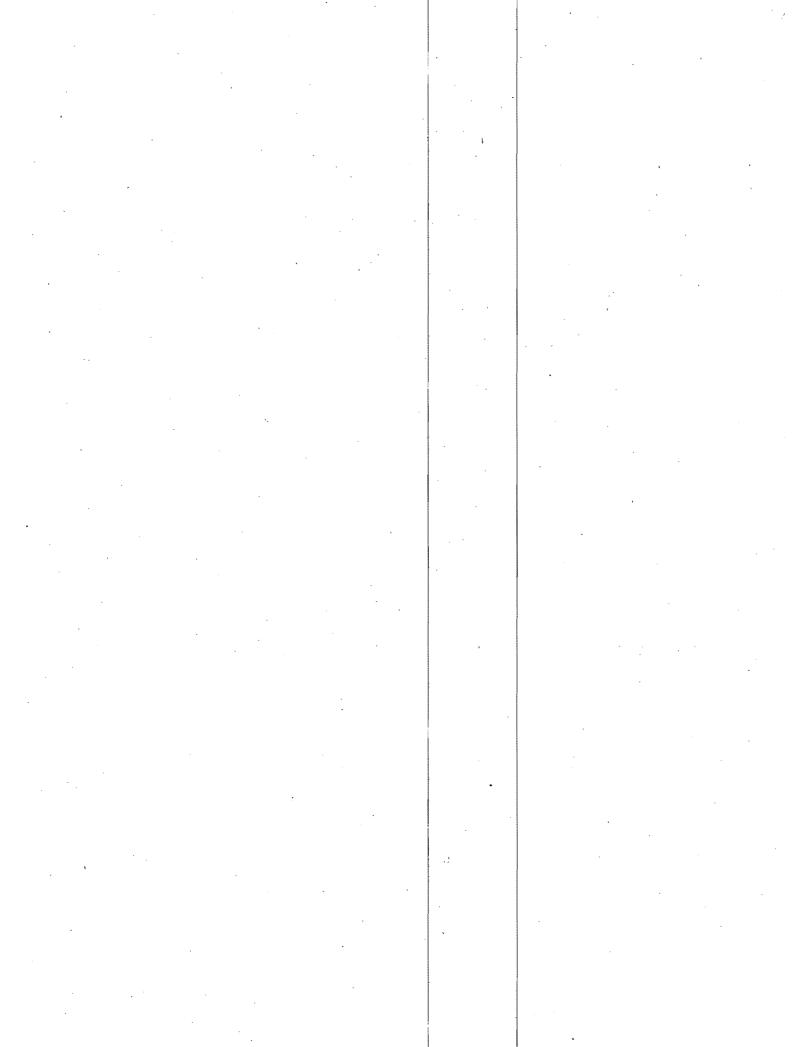
Executed in Pensacola, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION -

PRELIMINARY
David P. Morres, P.E.
Program Administrator Water Facilities
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DATE.



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FACT SHEET

FOR

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION INDUSTRIAL WASTEWATER FACILITY PERMIT

Permit Number: FL0002313

File Number: FL0002313-008-IW1S Application Date: October 24, 2005

Additional Information: February 2, 2006, September 5, 2006

Permit Writer: W. Armstrong, P.E.

1. SYNOPSIS OF APPLICATION

a. Name of Applicant

Jean-Michel Denis, Vice President

Taminco Methylamines Inc. (formerly Air Products and Chemicals, Inc.

1950 Lake Park Drive Smyrna, Georgia 30080

Facility Contact:

Ms. Reba L. Heath, Septon Environmental Specialist

Plant Address:

Taminco Methylamines Inc., Pace Plant 4575 Highway 90 East

Pace, FL

Santa Rosa County

b. Type of Facility - Chemical Manufacturing Complex

SIC code:

2869 Industrial Organic Chemicals

The Pace Plant of Taminco Methylamines Inc. (TMI) is a chemical manufacturing complex. Individual production facilities are clustered in two areas designated as "A" and "B". Plants located in Area A include two nitric acid plants (non-operational), two methylamines plants, a higher amines plant and a dimethylurea plant. Are B has a plant for the production of ammonium nitrate fertilizer (non-operational) and the wastewater treatment facilities.

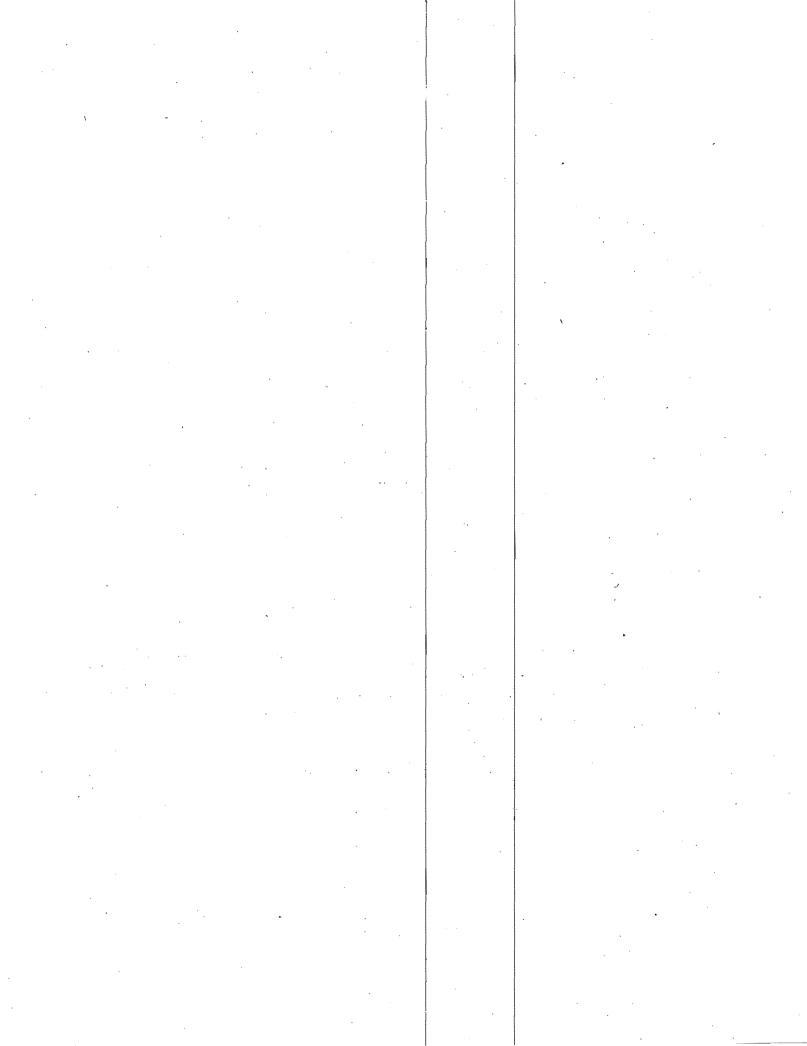
c. Facility Capacity

Existing Design Capacity:	1.23 MGD
Proposed Design Capacity	1.23 MGD
Process Flow	°0:22 MGD
Non-process Flow	1.01 MGD
Component to Perc Ponds	1.23 MGD
Discharge to Surface Water (SW)	0.00 MGD

Estimated Emergency Discharge

To Escambia Bay

0.07 MGD (overflow in excess of 25 year/24 hour storm)



d. Description of Facilities

The existing system is a wastewater treatment system for the industrial wastewaters generated by the Pace Plant of TMI. Individual production facilities includes two plants for the production of methylamines, two plants for the production of higher amines and a pilot plant, still operated by Air Products and Chemicals, Inc. (APCI), used for product development. Another facility retained by APCI, a liquid hydrogen terminal, is located on-site with a de minimis discharge associated with the activities at the terminal.

Wastewater treatment includes neutralization of the wastewater, equalization, anaerobic treatment, aerobic treatment and final percolation in the site Rapid Infiltration Basins (RIBs). Facility modifications, completed by the former owner, APCI, reduced the effluent impact on Escambia Bay of nutrients and oxygen depleting substances by eliminating effluent discharge to Escambia Bay except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events. During the last permit term, APCI constructed three (3) additional Rapid Infiltration Basins (RIBs) that substantially increased the disposal capacity of the land application system. APCI, also, shut down the methanol, ammonia, nutric acid and ammonium nitrate plants. The individual plants shutting down resulted in a reduction of process wastewater flow from 0.41 MGD to 0.22 MGD. The total design capacity remains at 1.23 MGD MADF with 1.23 MGD MADF discharging to the percolation pond system and an estimated 0.00 MGD MADF discharging to 1.23 MGD MADF discharge to surface waters except for amounts in excess of the land application system associated with 25 year, 24 hour daily rainfall events or equivalent chronic rainfall events.

e. Applicant's Effluent Disposal Location(s)

Surface Water Discharge: Receiving

Outfall D001: Escambia Bay, Glass III marine waters, Lat 30° 34' 05" N, Long 87° 09' 05" W

Land Application:

ecciving waters

Outfall G001: 7 percolation ponds totaling 848,600 ft² Surficial sand and gravel aquifer

f. Description of Effluent Discharges (as reported by applicant): Outfall Serial Number D001:

Pollutants present in significant quantities or which are subject to effluent limitations are as follows:

Parameters	Reported Data					
	Daily Maximum	Maximum 30 day average	Long Term Average			
Flow, MGD	2.94		0.07			
CBOD ₅ , mg/l / lbs/day	17.73 / 444.1	11.8 / 294.0	11.8 / 294.0			
COD, mg/l / lbs/day	`					
TOC, mg/l / lbs/day						
TSS, mg/l / lbs/day	12 / 300.6	12 / 250.5	8.0 / 250.5			
pH, (SU) .	min 6.7 / max 6.9	min 6.7 / max 6.9				
Ammonia, as N, mg/l / LBS/day	12.64 / 315.6	12.64 / 173.4	6.92/ 173.4			
Nitrate, mg/l / lbs/day	16.92 / 423.84	85.1 / 213.17	85.1 / 213.17			
Total Nitrogen (as N), mg/l / lbs/day	34.22 / 857.2	34.22 / 466.2	18.61 / 466.2			
Total Phosphorus (as P), mg/l / lbs/day	2.60 / 65.1	2.60 / 51.9	2.07 / 51.9			
Total Copper, mg/l / lbs/day	0.00048 / 0.0120	0.48 / 0.0101	0.41 / 0.0101			
Total Chromium, mg/l / lbs/day	0.071 / 0.1779					
Total Nickel	0.0022 / 0.0551					
Total Silver	. ND					
Total Zinc, mg/l / lbs/day	0.0038 / 0.0952	-				
Total Cyanide	ND					
GS/MS Fraction- VOC	ND					
GS/MS Fraction- Acid	ND					
GS/MS Fraction- BNA	ND					
GS/MS Fraction- Pesticides	ND	•				

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2. PROPOSED EFFLUENT WATER LIMITATIONS

a. The Discharge from Outfall D-001 shall be limited and monitored by the Applicant as specified below:

Parameters	Effluent Limitations			Monitoring Requirements		
	Monthly Average	Daily Maximum	Other	Frequency	Sample Type	Sample Location
Flow (MGD)	Report	Report	na ·	Continuous	Recorder	EFF-1
pH (SU)	na	na	6.5 to 8.5	Daily	Grab	EFF-1
Total Ammonia (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrate (MG/L as N)	Report	Report	Report (lbs/day as N)	1/week	Grab	EFF-1
Nitrogen, Total (MG/L)	Report	Report		1/week	Grab	EFF-1
Total Phosphorus (MG/L as P)	Report	Report	Report (lbs/day as P)	1/week	Grab	EFF-1
Total Suspended Solids (MG/L)	30	60	Report (lbs/day)	1/week	Grab	EFF-1
CBOD ₅ , (MG/L)	30	60	Report (lbs/day)	1/week	Grab	EFF-1
Total Recoverable Copper (UG/L)	na	na	Max 3.7 ug/l wqs	1/week	Grab	EFF-I
Rainfall (inches)	па	na	Report	Daily	24 Hour Total	
Whole Effluent Toxicity			\\$ee\beldy	w \		
OCPSF 40CFR414 Parameters			I the below	a		

b. OCPSF 40CFR414 Parameters - If there is a discharge the permittee shall initiate the series of tests described below to evaluate the compliance with effluent limitations of 40CFR414 (OCPSF) for the discharge of toxic pollutants from Outfall D001. These tests are required one time per calendar year for all discharge events.

The discharge must not exceed the concentration of the toxic pollutants listed below:

Outfall D001	Discharge Limitations			Monitor	ing Require	ements
40CFR414 (OCPSF) Limits						
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
1,1,1-Trichloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
1,1,2-Trichloroethane	0.0038	0.0097	na	I/year	Grab	EFF-1
1,1-Dichloroethane	0.0039	0.0106	na .	1/year	Grab	EFF-1
1,1-Dichloroethylene	0.0029	0.0045	na	· 1/year	Grab	EFF-1
1,2,4-Trichlorobenzene	0.0122	0.0250	na	1/year	Grab	EFF-1
1,2-Dichlorobenzene	0.0138	0.0292	na	l/year	Grab	EFF-1
I,2-Dichloroethane	0.0122	0.0377	na	1/year	Grab	EFF-1
1,2-Dichloropropane	0.0274	0.0411	па	1/year	Grab	EFF-1
1,2-trans-Dichloroethylene	0.0038	0.0097	na	1/year	Grab	EFF-1
1,3-Dichlorobenzene	0.0055	0.0079	na	1/year	Grab	EFF-1
1,3-Dichloropropylene [1,3-Dichloropropene]	0.0052	0.0079	na	1/year	Grab	EFF-1
1,4-Dichlorobenzene	0.0027	0.0050	na	l/year	Grab	EFF-1
2,4-Dichlorophenol	0.0070	0.0200	. na	1/year	Grab	EFF-1
2,4-Dimethylphenol	0.0032	0.0064	na	1/year	Grab	EFF-1

2. b. continued:

Outfall D001	Discharge Limitations		Monitoring Requirements			
40CFR414 (OCPSF) Limits						
Parameter (all units mg/l unless noted otherwise)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
2,4-Dinitrophenol	0.0127	0.0220	na	1/year	Grab	EFF-1
2,4-Dinitrotoluene	0.0202	0.0510	na	l/year	Grab	EFF-1
2,6-Dinitrotoluene	0.0456	0.1147	na	1/year	Grab	EFF-1
2-Chlorophenol	0.0055	0.0175	na	1/year	Grab	EFF-1
2-Nitrophenol	0.0073	0.0123	па	1/year	Grab	EFF-1
3,4-Benzofluoranthene [benzo(b)fluoranthene]	0.0041	0.0109	па	1/year	Grab	EFF-1
4,6-Dinitro-o-Cresol	0.0140	0.0495	па	Men	Grab	EFF-1
4-Nitrophenol	0.0129	0.0222	na	Nyear	Grab	EFF-1
Acenaphthene	0.0039	0.0106	A Pa O	1/vea	Grab	EFF-1
Acenaphthylene	wqs	1 Wys C	/\{\au\teo\d*\/	1/year	Grab	EFF-1
Acrylonitrile	0.0172	6.04331	na	1/year	Grab	EFF-1
Anthracene	0.0039	1 6/6/de 11	na	1/year	Grab	EFF-1
Benzene	D 0/0086/	0.0243	па	1/year	Grab	EFF-1
Benzo(a) Anthracene	wds	wqs	*0.031 µg/l*	1/year	Grab	EFF-1
Benzo(a) Pyrene	wqs	wqs	· *0.031 μg/l [#]	1/year	Grab	EFF-1
Benzo(k) Fluoranthene	wqs	wqs	*0.031 µg/l [#]	l/year	Grab	EFF-1
bis(2-Ethylhexyl)Phthalate	0.0184	0.0499	na	1/year	Grab	EFF-1
Carbon Tetrachloride	0.0032	0.0068	na	1/year	Grab	EFF-1
. Chlorobenzene	0.0027	0.0050	na	1/year	Grab	EFF-1
Chloroethane	0,0186	0.0479	na	1/year	Grab	EFF-1
Chloroform	0.0038	0.0082	na ·	1/year .	Grab	EFF-1
Chrysene	· wqs	wqs	*0.031 µg/l*	1/year	Grab '	EFF-1
Di-n-Butyl Phthalate	0.0048	0.0102	na	1/year	Grab	EFF-1
Diethyl Phthalate	0.0145	0.0363	na	1/year	· Grab	EFF-1
Dimethyl Phthalate	0.0034	0.0084	na	1/year	Grab	EFF-1
Ethylbenzene	0.0057	0.0193	, na	1/year	Grab	EFF-1
Fluoranthene	0.0045	0.0122	na	1/year	Grab	EFF-1
Fluorene	0.0039	0.0106	- na	1/year	Grab	EFF-1
Hexachlorobenzene	0.0027	0.0050	na	l/year ·	Grab	EFF-1
Hexachlorobutadiene	0.0036	0,0088	na	l/year	Grab	EFF-1
Hexachloroethane	0.0038	0.0097	na	1/year	Grab	EFF-1
Methyl Chloride	0.0154	0.0340	na	l/year	Grab	EFF-1
Methylene Chloride	0.0072	0.0159	na	1/year	Grab	EFF-1
Naphthalene	0.0039	0.0106	па	1/year	Grab	EFF-1
Nitrobenzene	0.0048	0.0122	na	1/year	Grab	EFF-1

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2. b. continued:

40CFR414 (OCPSF) Limits	D	Discharge Limitations		Monitoring Requirements		ents
Parameter (units mg/l unless noted)	Monthly Average	Daily Maximum	Other	Monitoring Frequency	Sample Type	Sample Point
Phenanthrene	wqs	· wqs	*0.031 µg/l#	1/year	Grab	EFF-1
Phenol	0.0027	0.0047	na	1/year	Grab	EFF-1
Pyrene	0.0045	0.0120	na	1/year	Grab	EFF-1
Tetrachloroethylene	wqs	wqs	Mx 8.85 μg/l#	1/year	Grab	EFF-1
Toluene	0.0047	0.0143	na	1/year	Grab	EFF-1
Total Recoverable Cyanide	wqs	wqs	Max 70.0 μg/l	l/year	Grab	EFF-1
Total Recoverable Chromium	wqs	wqs	Max 50 μg/l	l/year	Grab	EFF-1
Tot Rec Copper (UG/L)	wgs	wqs	Max 3.7 ug/l	1/week	Grab	EFF-1
Total Recoverable Lead	wqs	wqs	Max 8.5 μg/l	1/year	Grab	EFF-1
Total Recoverable Nickel	wqs	wqs	Max 8.3 μg/l	My year	Grab	EFF-I
Total Recoverable Zinc	wqs	wqs	Max 86.0 ag/1	Vyear	Grab	EFF-1
Trichloroethylene [ethene]	0.0038	0.0097	A Trail	leyear	Grab	EFF-1
Vinyl Chloride	0.0186	10478√		1/year	Grab	EFF-1

Notes: wqs - Those parameters with the maximum concentrations thereof as indicated in the "Other" column. [62-302.530(28),(30),657,(9), 17),(87), (64),(69), FAC]

#- Those parameters with the maximum concentrations that with the "symbol are based upon a 12-month rolling annual average basis. [62-302.530 Note (1), FAC]

- The limit for those parameters with the max concentrations marked with a "" symbol is the sum of 10 Polycyclic Aromatic Hydrocarbons (PAHs) and is limited to < 0.031 µg/l on an annual average basis: Acenaphthylene, Benzo(a) Anthracene, Benzo(a) Pyrene, Benzo(b) Fluoranthene, Benzo(ghi)perylene, Benzo(k) Fluoranthene, Dibenzo(a,h)anthracene, Indeno(1,2,3cd)pyrene, and Phenanthrene. [62-302.530(57) F.A.C.]

Whole Effluent Toxicity Testing Requirements - If there is a discharge, the permittee shall initiate a series of tests to evaluate whole effluent toxicity of the discharge from Outfall D001 in accordance with Condition I.F. of Industrial Wastewater Permit #FL0002313. While discharging from Outfall D-001 the whole effluent toxicity tests shall be performed for each occurrence of a discharge but not more than one time per calendar year.

c. The Discharge from Land Application System <u>G-001</u> shall be limited and monitored by the Applicant as specified below at EFF-3 or EFF-4, whichever is in use at the time of sampling:

							
G-001 (WAFR 37240)		Discharge Limitations			Monitoring Requirements		
Parameters (units)	Mo Avg.	Daily Max.	Other -specify	Frequency	Sample Type	Sam Pnt	
2,4-Dinitrotoluene, (µg/l)	na	** Report	na .	1/month	24 hour composite	EFF-3, 4	
2,6-Dinitrotoluene, (µg/l)	na	** Report	na	1/month	24 hour composite	EFF-3, 4	
CBODs, (mg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4	
Chemical Oxygen Dem, COD, (mg/l)	na	Report	na	1/month	24 hour composite	EFF-3, 4	
Flow, (MGD)	Report	Report	na	Continuous	Recorder	EFF-3, 4	
Nitrate - Nitrite, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4	
Organic Nitrogen, (mg/l as N)	Report	Report	na ·	weekly	Calculated	EFF-3, 4	
pH, (standard units)	na	na	Report min & max	5/week	Grab	EFF-3, 4	
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4	
Total Dissolved Solids TDS, mg/l	Report	Report	na	weekly	24 hour composite	EFF-3, 4	
Tot. Kjeldahl Nitr. TKN, (mg/l as N)	Report	Report	na	weekly	24 hour composite	EFF-3, 4	
Total Nitrogen, (mg/l as N)	Report	Report	na	weekly	Calculated	EFF-3, 4	
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	24 hour composite	EFF-3, 4	
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	24 hour composite	EFF-3, 4	

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3. BASIS FOR EFFLUENT LIMITS AND MONITORING REQUIREMENTS

APCI attained a "zero-discharge" level during the last cycle with a provision for discharges on an "emergency only" basis and the plant now operates without a discharge to surface waters with the exception of significant rain events. The proposed effluent limits are based on the most stringent of current State water standards and BPCT/TBE Limits. Previous permitted effluent limits were taken into consideration whenever appropriate. The final BPT and BAT limits are applied as concentrations as opposed to mass limits since the facility will be permitted to discharge on an "emergency only" basis.

The following table provides the basis for Part I. A. provisions.

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Parameter	Units	Limit	AMAR II	Rationale
Flow	MGD	Report	Monthly Average	BPJ
pH (SU)	SU	85	Daily Maximum Daily Minimum	EGL is not as stringent as WQC 62-302.530(52)(c) FAC
Total Ammonia, (as N)	D) May (S	Report	Monthly Average Daily Maximum	BPJ; Ammonia plant shut down, Reporting required because total ammonia is required for the determination of unionized ammonia
Nitrate (as N)	MOYE	Report	Monthly Average Daily Maximum	BPJ; ammonium nitrate plant shut down, required for the determination of total nitrogen
Total Nitrogen	MG/L	Report	Monthly Average Daily Maximum	No EGL Limit, BPJ, Emergency discharge only
Total Phosphorus (as P)	MG/L	Report	Monthly Average Daily Maximum	No EGL Limit, BPJ, Emergency discharge only
Total Suspended Solids	MG/L	30 60	Monthly Average Daily Maximum	40CFR414; 62-660.400; 62-600.420; treatment based limits more restrictive than 40CFR414 limits; see discussion below
CBOD ₅	MG/L	30 60	Monthly Average Daily Maximum	40CFR414; 62-660.400; 62-600.420; adjusted as discussed below; BPJ
Total Recoverable Copper	MG/L	Max 0.0037	Monthly Average Daily Maximum	40CFR414; BPJ limits based on concentration only due to intermittent/ emergency discharge.
Rainfall	Inches	Report		ВРЈ
Whole Effluent Toxicity			See B	Below
OCPSF 40CFR414	UG/L		Monthly Average Daily Maximum	40CFR414; BPJ limits based on concentration only due to intermittent/ emergency nature of the discharge. See below

The following were used as the basis of the permit limitations/conditions:

A. FAC refers to various portions of the Florida Administrative Code.

The effective dates of FAC Rule Chapters cited in the permit and in this document are as follows:

Chapter	Effective Dat
62-302	05-15-02
62-600	12-24-96
62-620	08-25-03
62-660	10-01-98

- B. FS refers to various portions of the Florida Statutes
- C. CFR refers to various portions of the Code of Federal Regulations, Title 40
- D. BPJ refers to Best Professional Judgment

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Determination of 40CFR414.91(b) OCPSF TBEL limits:

According to 40 CFR §414, the monthly average and daily maximum lbs/day discharge limitations are determined by multiplying the long-term average process flow, as defined in Federal Register, Volume 58, No. 130, by the concentrations listed in 40 CFR §414.91. The final limits for this Permit are concentration based due to the unlikely occurrence of a discharge and the unpredictable nature of the discharge. At full production the total LTA flow would be 1.23 MGD with a process flow of 0.22 MGD; based on these data, the TBEL concentration limits were determined as follows. Since the permittee's process flow mixes with non-process flow prior to discharge, the discharge limitation determined from 40 CFR §414.91 must be adjusted (weighted).

40 CFR § 414.91(b)(2) lists a daily maximum effluent concentration value for Acrylonitrile of 242 µg/l. With a total wastewater flow of 1.23 MGD and a process flow of 0.22 MGD, the daily maximum discharge concentration limitation for Acrylonitrile is calculated as follows:

 $P = EGL \times N/T$ where P is the final effluent limitation for Outfall D001 in mg/l

EGL is the 40 CFR §414.91 effluent guideline limitation in µg/l

N is process wastewater flow (0.22 MGD)

T is the total wastewater flow (1.23 MDD)

 $P = (242 \mu g/l) * (0.22 MGD) / (1.23 MGD)$ resulting in an adjusted dally maximum effluent guideline concentration limit for Acrylonitrile of 43.28 $\mu g/l$.

The adjusted 40CFR414.91 limits were compared with State WOS limits. If the State WQS was more stringent it was used as the effluent limit. See proposed limit take

Determination of limits for BOD and T88 pased on 40CFR414

Parameter	\mathcal{T}	V	Applicable Guidelines
Biochemical Oxygen Dem	and		40 CFR 414: Subpart G: Methylamines Production
(BOD ₅)			40 CFR 414: Subpart H: Alkyl Amines Production
Total Suspended Solids			40 CFR 414: Subpart G: Methylamines Production
(TSS)			40 CFR 414: Subpart H: Alkyl Amines Production

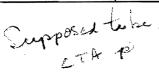
Calculations for Parameters covered under Effluent Limitations Guidelines in 40 CFR

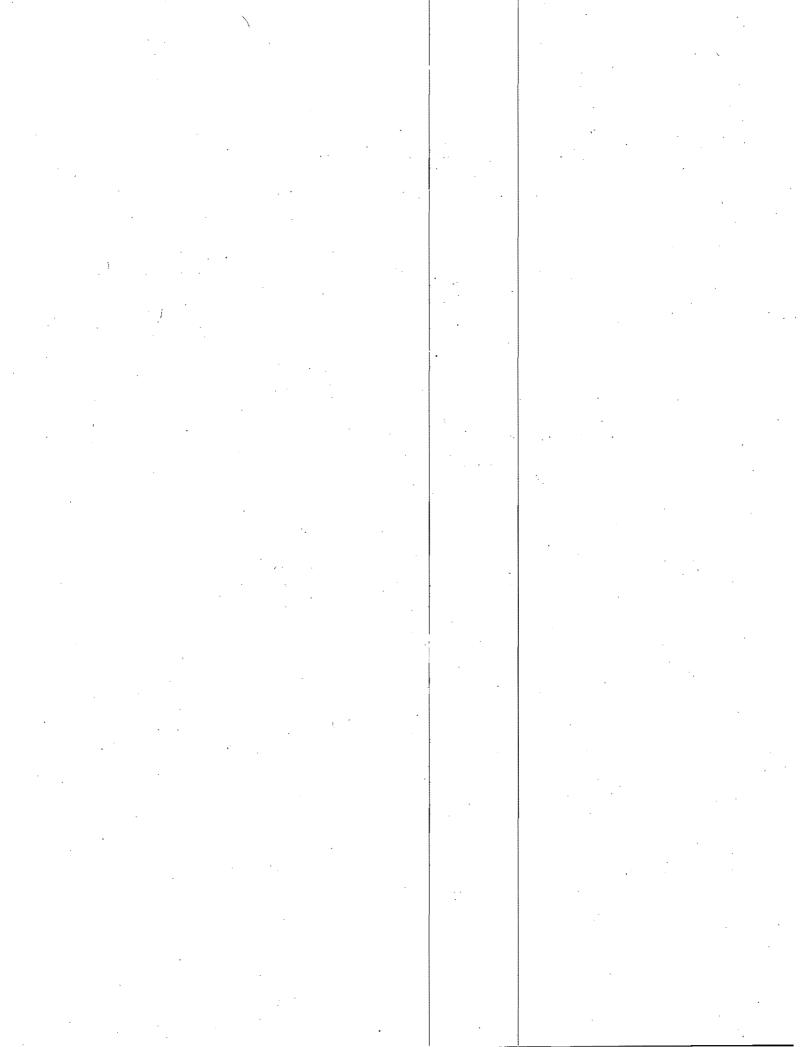
Pertinent Information used in Calculations

40 CFR 414 Subcategory	Proposed LTA Process	Flow Proportion
Subpart G: Methylamines Production	0.15 MGD	0.68
Subpart H: Alkyl Amines Production	0.07 MGD	0.32
<u>Totals</u>	0.22 MGD	1.00

Summary of Subcategory Effluent Limits for BOD5, TSS and pH for TBEL Limits

					• *
40 CFR 414 Subcategory	BOD ₅ (mg/l)	BOD ₅ (mg/l)	TSS (mg/l)	TSS (mg/l)	рН
,	(Daily Max.)	(Monthly Avg.)	(Daily Max.)	(Monthly Avg.)	-
Subpart G: Methylamines Production	92 🗸	34 🗸	159	49 —	6.0-9.0
Subpart H: Alkyl Amines Production	120 🗸	45 🗸 .	183	57 V	6.0-9.0





Calculations for BOD5 and TSS

Limit (mg/l) = Subcategory limit (mg/l) x Flow Proportion

(Sum of weighted Subpart limits equals new, calculated TBEL)

BOD ₅ Daily Maximum	Final
Subpart G: Methylamines Production	92 mg/l x 0.68 = 62.56 mg/l
Subpart H: Alkyl Amines Production	120 mg/l x 0.32 = 38.40 mg/l
BOD ₅ Daily Maximum (total)	100.96 mg/l

Final
34 mg/l x 0.68 = 23.12 mg/l
45 mg/l x 0.32 = 14.40 mg/l
37.52 mg/l

TSS Daily Maximum	Final
Subpart G: Methylamines Production	159 mg/l × 0.53 = (108, 12 mg/l
Subpart H: Alkyl Amines Production	183/mg/14-0.32 = \58.56 mg/1
TSS Daily Maximum (total)	1 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	ph1///
	mg/ x 0.68 = 33.32 mg/l
Subpart H: Alkyl Amines Production \\ \\ 37	$mg/l \times 0.32 = 18.24 mg/l$
TSS Daily Average (total)	51.56 mg/l

The limits for BOD₅ and TSS based on 40CFR414 are 100.96/37.52 mg/l and 166.68/51.56 mg/l (daily maximum/monthly average) State secondary treatment standards (62-660.400 & 62-600.420 FAC) require an annual average limit of 20 mg/l for TSS and BOD; when adjusted to daily maximum/monthly average the values are 60/30 mg/l. The limitations were based on combined maximum allowable values for process and non-process flows.

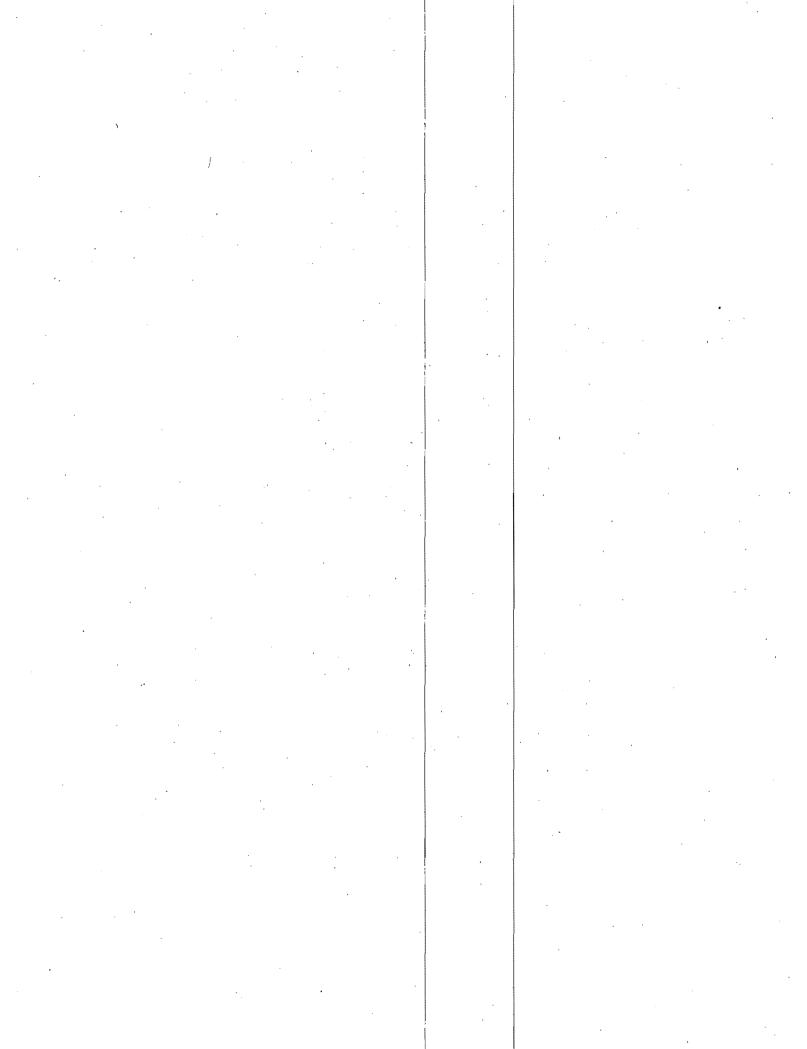
BOD Limit Calculations:

40CFR414 limits: (process flow) 37.52 mg/l & 100.96 mg/l @ 0.22 MGD = 68.84 lbs/day & 185.24 lbs/day Secondary Treatment: (non-process) 30 mg/l & 60 mg/l @ 1.01 MGD = 252.70 lbs/day & 505.40 lbs/day Total = 1.23 MGD = 321.54 lbs/day & 690.64 lbs/day

Equivalent BOD₅ concentrations: 321.54 lbs/day @ 1.23 MGD = 31.34 mg/l (more than state standard of 30 mg/l) 690.64 lbs/day @ 1.23 MGD = 67.33 mg/l (more than state standard of 60 mg/l)

TSS: The state treatment based concentration limits for TSS (30/60 mg/l) are more stringent than the 40CFR414 limits and are applied as effluent limits.

The facility has provided reasonable assurance that the discharge will not adversely affect the designated use of receiving water. Available data have been evaluated in accordance with the Department's reasonable assurance procedures to ensure that no limits other than those included in this permit are needed to maintain Florida water quality standards.



The following table provides the basis for Part I. B. provisions.

Outfall G-001 - No changes are proposed to the existing limits in the current permit:

G-001	Discharge Limitations			Monitoring Requirements	Basis for Limit/Monitoring Requirement
Parameters (units)	Monthly Avg.	Daily Max.	Other - specify	Frequency	
2,4-Dinitrotoluene, (μg/l) ¹	na	Report	na	1/month	BPJ, GW Guidance Concentration, CO# 94-1833
2,6-Dinitrotoluene, (μg/l) ¹	na	Report	na	1/month	BPJ, GW Guidance Concentration, CO# 94-1833
CBOD ₅ , (mg/l)	na	Report	na	1/month	EPJ to monitor effluent
Chemical Oxygen Demand, COD, (mg/l)	na	Report	na 🔾	1/month	BPJ to monitor effluent
Flow, (MGD)	Report	Report	na	Continuous	BPJ to monitor effluent
Nitrate - Nitrite, (mg/l as N)	Report	Report \	111117	lyteckly	PDWS, 62-520.420
Organic Nitrogen, (mg/l as N)	Report	Berot	na	weekly	BPJ to monitor effluent
pH, (standard units)	na D		Report min &max	5/week	Exempt from SDWS 62-520.420
Total Ammonia, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
Total Dissolved Solids TDS, mg/l	Report	Report	na	weekly	Exempt from SDWS 62-520.420
Total Kjeldahl Nitrogen TKN, (tng/l as N)	Report	Report	па	weekly	BPJ to monitor effluent
Total Nitrogen, (mg/l as N)	Report	Report	na	weekly	BPJ to monitor effluent
Total Phosphorus, (mg/l as P)	Report	Report	na	weekly	BPJ to monitor effluent
Total Suspended Solids, (mg/l)	Report	Report	na	weekly	BPJ to monitor effluent

¹ Consent Order No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (μg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. DEP's Ground Water Guidance Concentration Booklet lists 0.2 μg/l for the combined 2,4-Dinitrotoluene and 2,6-Dinitrotoluene mixture. A guidance concentration is not a ground water minimum criteria, 62-520.400, F.A.C. unless authorized by the Secretary.

4. The following monitoring wells are included in the ground water monitoring plan for the wastewater treatment pond areas.

Well Name	Old ID	WAFR No.	Depth	Aquifer	Well Type	New/Existing
Plant Area A Monitoring Wells						
MWB-A1	A-1	1578	90	Surficial	Background	Existing
MWI-A2	A-2	1577	75	Surficial	Intermediate	Existing
MWC-A3	A-3	1576	64	Surficial	Compliance	Existing

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4. continued:

Well Name	Old ID	WAFR No.	Depth	Aquifer	Well Type	New/Existing
Plant Area B Monitoring Wells						
MWB-1	na	46352	tbd	· Surficial - Shallow	Background	Existing
MWB-PW5	PW-5	46353	265	Surficial - Deep	Background	Existing
MWI-B1	B-1	1575	100	Surficial - Shallow	Intermediate	Existing
MWI-B5	B-5	. 1568	55	Surficial - Shallow	Intermediate	Existing
MWI-E5	E-5	1570	48	Surficial - Shallow	Intermediate	Existing
MWI-PW7	· PW-7	46354	tbd	Surficial - Deep	Intermediate	Existing
MWP-IT17	MWI-IT17	46356	86	Surficial - Shallow	Piezometer	Existing
MWI-E1(S)	E-1(S)	46359	48	Surficial - Shallow	Intermediate	Existing
MWI-E2(S)	E-2(S)	46360	42	Surficial - Shallow	nermediate	Existing
MWI-E6(S)	E-6(S)	46361	37	Silvite in Shorton	Intermediate	Existing
MWC-B4	B-4	1569	√ ²⁵ √	Surlicial Shallow	Compliance	Existing
MWC-E3	E-3	1572	7850	Sufficient Shallow	Compliance	Existing
MWP-PZ10	MWC-PZ10	A898\	11/19/1	Surficial - Deep	Piezometer	Existing
MWP-IT20	MWC-IT20 D	402500	35	Surficial - Shallow	Piezometer	Existing
MWC-2	na \	46358	tbd	Surficial - Deep	Compliance	Existing
MWC-303	SW-303	48229	150	Surficial - Deep	Compliance	Existing
MWI-17R	na	48227	tbd	Surficial - Shallow	Intermediate	Existing
MWC-20R	Na	48228	tbd	Surficial - Shallow	Compliance	Existing

5. The wells included in the ground water monitoring plan shall be sampled for the parameters and frequencies listed below:

Parameters (units)	Monitoring Requirements				
	Frequency	Compliance Limits ²	Basis of Limit / Monitoring Requirement		
2,4-Dinitrotoluene, (μg/l)	Quarterly	Report	BPJ, GW Guidance conc., CO # 94-1833 ¹		
2,6-Dinitrotoluene, (µg/l)	Quarterly	Report	BPJ, GW Guidance conc., CO # 94-1833		
Nitrate - Nitrite, (mg/l)	Quarterly	10.0 mg/l	PDWS, 62-520.420		
Organic Nitrogen, (mg/l as N)	Quarterly	Report	BPJ to monitor ground water		
pH, (standard units)	Quarterly	Report	exempt SDWS 62-520.420 (6.5-8.5)		
Sodium (mg/l)	Quarterly	160.0	PDWS, 62-520.420		

² Compliance with Part III.4. and IV.1., Permit No. FL0002313, is not required for the Plant Area B wells during the active term of Consent Order No. 94-1833 for compliance wells or the zone of discharge subject to the requirements of Consent Order No. 94-1833.

¹ Consent Order No. 94-1833 sets a technology based goal of 0.2 and 0.1 micrograms per liter (μg/l) for 2,4-Dinitrotoluene and 2,6-Dinitrotoluene respectively. DEP's Ground Water Guidance Concentration Booklet lists 0.2 μg/l for the combined 2,4-Dinitrotoluene and 2,6-Dinitrotoluene mixture. A guidance concentration is not a ground water minimum criteria, 62-520.400, F.A.C. unless authorized by the Secretary.

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Parameters (units)	Monitoring Requirements		
,	Frequency	Compliance Limits ²	Basis of Limit/Monitoring Requirement
Specific Conductance, (µmhos/cm)	Quarterly	Report	BPJ to monitor ground water
Temperature (degrees C)	Quarterly	Report	BPJ to monitor ground water
Total Ammonia, (mg/l as N)	Quarterly	Report	BPJ to monitor ground water
Total Dissolved Solids, (mg/l)	Quarterly	Report	exempt SDWS 62-520.420
Total Kjeldahl Nitrogen, TKN, (mg/l)	Quarterly	Report	BPJ to monitor ground water
Total Nitrogen, (mg/l)	Quarterly	Report	BPJ to monitor ground water
Total Phosphorus, (mg/l as P)	Quarterly	Report	BP to monitor ground water
VOC, (μg/l)	Quarterly	Report any detected	BR) to monitor ground water
Trichloroethene, (μg/l)	Quarterly	3 да С	PDWS 62-520,420
1,2-Dichloroethane, (µg/l)	Quarter 1	348/1/1/	PDWS, 62-520.420
cis-1,2-Dichloroethene, (µg/l)	Quarterly	7d heli	PDWS, 62-520.420
Water Level, (MSL)	Quarterly	Report	BPJ to monitor ground water

² Compliance with Part III.4. and IV. 1, Permit No. FL.002313, is not required for the Plant Area B wells during the active term of Consent Order No. 94-1833 for compliance wells or the zone of discharge subject to the requirements of Consent Order No. 94-1833.

6. RESIDUALS MANAGEMENT

The method of disposal for sludge or residuals generated by the treatment of industrial wastewaters by this facility is off site to a Class I landfill in accordance with permit condition II. B.

7. REQUESTED VARIANCES OR ALTERNATIVES TO REQUIRED STANDARDS

TMI has not requested any relief in this application.

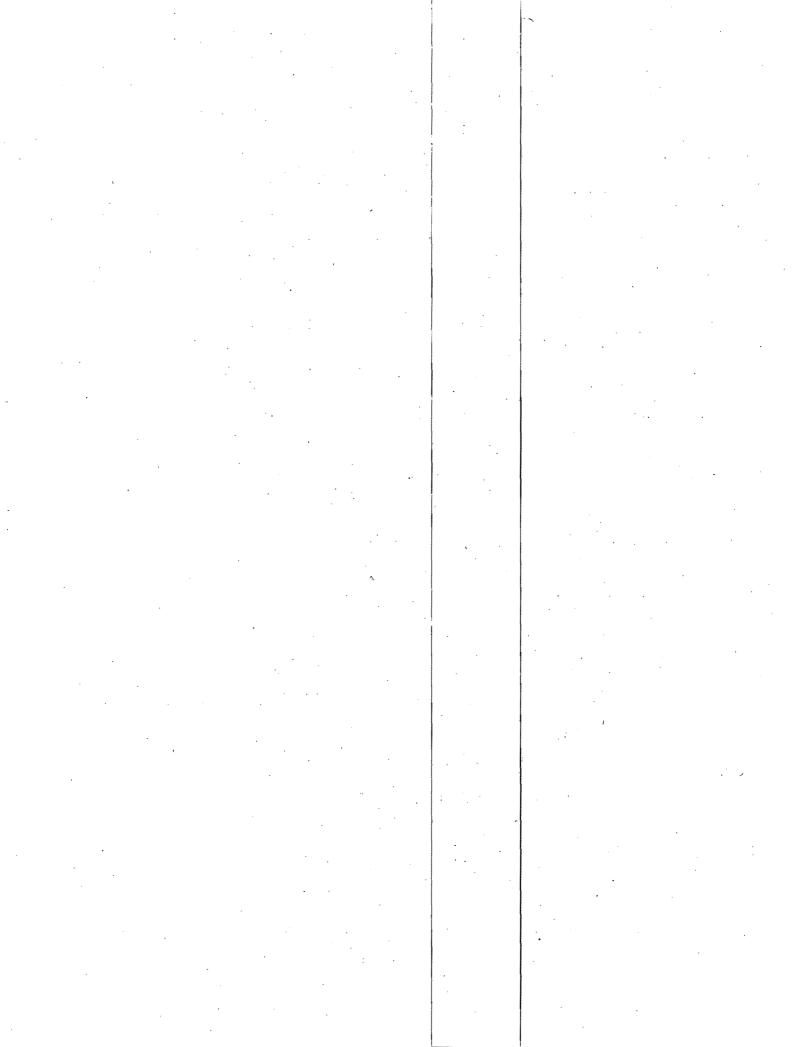
8. COMPLIANCE SCHEDULE AND EFFECTIVE DATE OF FINAL EFFLUENT LIMITATIONS

- a. The permittee has achieved compliance with the final wastewater plant surface water discharge effluent limits, Part I.A.1. in accordance with Administrative Order AO022NW.
 - 1. The Permittee has completed assessment of compliance with the final wastewater plant surface water discharge effluent limits, Part I.A.1., Permit No. FL0002313. The following projects have been completed:
 - a. Implementation of the groundwater remediation project in accordance with Consent Order No. 94-1833 effective on September 19, 1995 to collect, treat, and dispose, by other than surface water discharge, the Interceptor Ditch contaminated groundwater.
 - b. Expansion of Land Application System (Percolation Ponds)
 - c. The permittee has achieved compliance with the Industrial Wastewater requirements of Consent Order #94-1833. Consent Order was transferred to the DEP NWD Waste Cleanup Section on January 29, 2003.
 - d. TMI has achieved compliance with the Copper concentration of the final wastewater plant surface water discharge effluent limits listed in Permit No. FL0002313.

9. <u>DISCUSSION OF PERMIT EFFLUENT LIMITATIONS</u>

The Permittee has achieved a zero discharge to Escambia Bay with various plant component shutdowns and expansion of the land application system. They are authorized by this permit to discharge to the Bay during extreme rainfall events in excess of the 25 year/24 hour storm. New effluent limits were calculated using concentration limits instead of mass limits as discharge to the Bay is on an "Emergency Only" basis.

In this permit the point of compliance for the surface water discharge is the Alpha Pond discharge. This permit is also monitoring the effluent discharge to the land application, percolation pond system, directly.



10. EFFECTS OF SURFACE WATER DISCHARGE ON THREATENED OR ENDANGERED SPECIES

The Department does not anticipate adverse impacts on any threatened or endangered species as a result of permit renewal.

11. DEP CONTACT

Additional information concerning the permit may be obtained during normal business hours from:

W. Armstrong, P.E., Industrial Wastewater Section Supervisor Florida Department of Environmental Protection Northwest District Office 160 Governmental Center

Pensacola, FL 32502-5794 Telephone No.: (850) 595-8300

12. THE ADMINISTRATIVE RECORD

The administrative record including application, draft permit, fact spect public notice (after release), comments received and additional information is available for public inspection during normal business hours at the location specified in item 11.

13. PROPOSED SCHEDULE FOR PERMIT ISSUAN

Draft permit to Applicant and EPAY | White November 20, 2006

Proposed Public Comment Period \ Beginning: November 27, 2006

Ending: December 27, 2006

Public Notice of Intent To Issue Permit January 6, 2007

Completion of Public Comment Period January 20, 2007

Final Department Action February 20, 2007

14. PROCEDURES FOR THE FORMULATION OF FINAL DECISION ON PERMIT ISSUANCE

a. Public Comment Period

The Department of Environmental Protection proposes to issue a wastewater facility permit to this applicant subject to the aforementioned reclaimed water or effluent limitations and conditions. This decision is tentative and open to comment from the public.

Interested persons are invited to submit written comments regarding permit issuance on the draft permit limitations and conditions to the following address:

Florida Department of Environmental Protection Northwest District Office Attn.: W. Armstrong, P.E.

160 Governmental Center Pensacola, FL 32502-5794

All comments received within 30 days following the date of public notice, pursuant to Rule 62-620.550, F.A.C., will be considered in the formulation of the final decision with regard to permit issuance.

Any interested person may submit written comments on the Department's proposed permitting decision or may submit a written request for a public meeting to the address specified above, in accordance with Rule 62-620.555, F.A.C. The comments or request for a public meeting must contain the information set forth below and must be received in the above named District office of the Department within 30 days of receipt or publication of the public notice. Failure to submit comments or request a public meeting within this time period will constitute a waiver of any right such person may have to submit comments or request a public meeting under Rule 62-620.555, F.A.C.

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The comments shall contain the following information:

- (1) The commenter's name, address and telephone number, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (2) A statement of how and when notice of the draft permit was received;
- (3) A description of any changes the commenter proposes for the draft permit;
- (4) A full explanation of the factual and legal reasons for each proposed change to the draft permit

b. Public Meeting

The Department may hold a public meeting if a significant request is received for a public meeting. Public notice of such a meeting shall be published by the applicant at least 30 days prior to the meeting.

When a public meeting is scheduled the public comment period is extended until the close of the public meeting. When a public meeting is held any person may submit oral or written statements and data at the meeting on the Department's proposed action.

c. <u>Issuance of the Permit</u>

The Department will make its decision regarding permit issuance after consideration of all written comments, including comments from the United States Environmental Protection Agency on surface water discharge aspects of the draft or proposed permit; the requirements of Chapter 403, F. S. and appropriate rules; and, if a public meeting is held, after consideration of all comments, statements and that presented at the public meeting. The Department will respond to all significant comments in writing. The Department's response to significant comments will be included in the administrative record of the permit and will be available for public inspection at the above named District office of the Department.

Unless a request for a administrative hearing, or an extension of time to file a petition for an administrative hearing, as indicated in d. below, is granted, the Department will take final agency action by issuing the permit or denying the permit application. If an administrative hearing is convened, final agency action will be based on the outcome of the hearing.

d. Administrative Hearing

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any other person must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the discretion of the presiding officer upon the filing of a motion in compliance with rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

- (a) The name, address, and telephone number of each petitioner; the Department's permit identification number and the county in which the subject matter or activity is located;
- (b) a statement of how and when each petitioner received notice of the Department's action;
- (c) a statement of how each petitioner's substantial interests are affected by the department's action;
- (d) a statement of the material facts disputed by the petitioner, if any;
- (e) a statement of facts that the petitioner contends warrant reversal or modification of the Department's action;
- (f) a statement of which rules or statutes the petitioner contends require reversal or modification of the Department's action; and
- (g) and a statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take.

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Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Any person may elect to pursue mediation by reaching a mediation agreement with all parties to the proceeding (which includes the Department and any person who has filed a timely and sufficient petition for a hearing) and by showing how the substantial interests of each mediating party are affected by the Department's action or proposed action. The agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

The agreement to mediate must include the following:

- (a) the names, addresses, and telephone numbers of any persons who may attend the mediation;
- (b) the name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;
- (c) the agreed allocation of the costs and fees associated with the mediation;
- (d) the agreement of the parties on the confidentiality of discussions and documents introduced during mediation;
- (e) the date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;
- (f) the name of each party's representative who shall have authority to settle or recommend settlement;
- (g) either an explanation of how the substantial interests of each mediating party will be affected by the action or proposed action addressed in this action or a statement clearly identifying the petition for hearing that each party has already filed, and incorporating it by reference; and
- (h) the signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by section 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above, and must therefore file their petitions within fourteen days of receipt of this notice. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under section 120.569 and 120.57 remain available for disposition of the dispute, and the notice will specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

